DOCUMENT RESUME

ED 418 726 IR 057 028

TITLE	Report on Legal Protection for Databases. A Report of the Register of Copyrights. August, 1997.
INSTITUTION	Library of Congress, Washington, DC. Copyright Office.
ISBN	ISBN-0-16-049211-4
PUB DATE	1997-08-00
NOTE	234p.
AVAILABLE FROM	U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328 ($20; non-U.S. price, $25).
PUB TYPE	Books (010) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	Access to Information; *Copyrights; *Databases; Fair Use (Copyrights); Federal Legislation; *Federal Regulation; *Information Policy; Information Technology; *Intellectual Property; Legal Problems; Nonprint Media
IDENTIFIERS	*Copyright Office

ABSTRACT

This report gives an overview of the past and present domestic and international legal framework for database protection. It describes database industry practices in securing protection against unauthorized use and Copyright Office registration practices relating to databases. Finally, it discusses issues raised and concerns expressed in a series of Copyright Office meetings to create a new federal intellectual property right in databases. The report is divided into the following sections: (1) "Copyright Protection for Databases in the United States"; (2) "Database Industry Practices"; (3) "Copyright Office Registration Practices"; (4) "The International Context"; (5) "Prior Congressional Consideration"; (6) "Copyright Office Meetings"; and (7) "Issues" (including general, needs for additional protection, form of new protection, definitions, public interest users, duration, sole source data, and constitutionality). Appendices include: the Copyright Office Circular 65; European Database Directive; Proposed WIPO Database Treaty; Database Investment and Intellectual Property Antipiracy Act of 1996, H.R. 3531; and Copyright Office Database Meeting Participants. (AEF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 418 726

Report on Legal Protection for Databases

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

U.S. Copyright Office

August 1997

IR057028

BEST COPY AVAILABLE

Report on
Legal Protection for
Databases

U.S. Copyright Office

August 1997

A Report of the Register of Copyrights

BEST COPY AVAILABLE

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISBN 0-16-049211-4

Library of Congress Cataloging-in-Publication Data

Library of Congress. Copyright Office.
Report on legal protection for databases : a report of the Register of Copyrights, August 1997.
p. cm.
1. Copyright--Databases--United States. 2. Databases--Law and legislation--United States. 3. Database industry--Law and legislation--United States. I. Title.
KF3024.C6L53 1997
346.7304'82--dc21 97-34664
CIP

The Register of Copyrights
of the
United States of America

Library of Congress
Department 17
Washington, D.C. 20540

(202) 707-8350

August 18, 1997

Dear Mr. Chairman:

I am pleased to present the Copyright Office report on legal protection for databases that you requested in your April 8, 1997 letter. The report describes the history and present state of the law regarding database protection in the United States and internationally, and identifies the issues raised by proposals to create a new federal intellectual property right in databases. In doing so, the report outlines various options to address some concerns that have been voiced. It does not make recommendations as to the advisability of creating federal protection for databases, or the form that any such protection might take.

In preparing the report, the Copyright Office held sixteen meetings with a broad spectrum of affected industries and communities to listen to their concerns, and spoke to numerous others on an informal basis. The final report presents a synthesis of the views expressed in those meetings and discussions.

The report is intended to serve as a starting point for the Judiciary Committee's consideration in evaluating whether there is a need for new protection, and if so, how legislation can be crafted to meet this need without causing negative consequences. We believe that such an important matter deserves thorough consideration and full debate, and offer this report as an initial step in that process. As the Committee begins to address the issues, the Copyright Office would be pleased to assist in any way. We look forward to discussing possible next steps with you and your staff.

Sincerely,

Marybeth Peters

Marybeth Peters
Register of Copyrights

The Honorable Orrin G. Hatch
Chairman, Committee on the Judiciary
United States Senate
131 Russell Senate Office Building
Washington, D.C. 20510

ORRIN G. HATCH, UTAH, CHAIRMAN

1 THURMOND, SOUTH CAROLINA
ES E. GRASSLEY, IOWA
SPECTER, PENNSYLVANIA
HOMPSON, TENNESSEE
'L, ARIZONA
EWINE, OHIO
ASHCROFT, MISSOURI
ER ABRAHAM, MICHIGAN
ESSIONS, ALABAMA

PATRICK J. LEAHY, VERMONT
EDWARD M. KENNEDY, MASSACHUSETTS
JOSEPH R. BIDEN, JR., DELAWARE
HERBERT KOHL, WISCONSIN
DIANNE FEINSTEIN, CALIFORNIA
RUSSELL D. FEINGOLD, WISCONSIN
RICHARD J. DURBIN, ILLINOIS
ROBERT G. TORRICELLI, NEW JERSEY

MANUS COONEY, *Chief Counsel and Staff Director*
BRUCE A. COHEN, *Minority Chief Counsel*

United States Senate
COMMITTEE ON THE JUDICIARY
WASHINGTON, DC 20510–6275

April 8, 1997

The Honorable Marybeth Peters
Register of Copyrights
U.S. Copyright Office
Library of Congress
Washington, D.C. 20540

Dear Ms. Peters:

During the past year the matter of database protection has been raised in Congress and in treaty discussions under the auspices of the World Intellectual Property Organization. As you are aware, legislation (H.R. 3531) was introduced in the House of Representatives in the last congress to create a sui generis federal intellectual property right for creators of databases, but the Senate has not yet considered the matter.

Last year's legislative and treaty proposals initiated discussions domestically which demonstrate that creating a new intellectual property right in databases raises a number of significant policy questions, such as the adequacy of copyright protection for databases and the effect of a sui generis right on access to information for research and education.

In order to assist the Committee as it considers whether a new form of protection for databases is necessary and appropriate, and if so, what form it should take, I would like the Copyright Office to undertake a study to identify the issues and concerns raised, and develop policy options and recommendations based on those issues and concerns. Conducting meetings with the affected communities would be an appropriate starting point. I would ask that the office report to the Committee by August 18, 1997. I understand that this deadline will not delay any ongoing projects, such as your inquiry into the satellite and cable compulsory licenses.

Please let me know how you might be of assistance to the Committee in dealing with this important matter and suggest an appropriate timetable for the process of party consultation and development of recommendations.

Thank you for your assistance in this matter.

Sincerely,

Orrin Hatch

Orrin G. Hatch
Chairman

OGH:edd

ACKNOWLEDGMENTS

This report covers the history of copyright protection for databases in the United States, describes database industry practices seeking protection against unauthorized use, describes the Copyright Office's database registration practices, summarizes international developments in the area and database legislation introduced in the last Congress, and discusses the issues and concerns that were raised by the participants in the many meetings held by the Office.

The "sweat" of a great many "brows" went into the preparation of this report. The Copyright Office was fortunate to be able to draw on many talented staff. I thank Shira Perlmutter, Associate Register for Policy and International Affairs, Jesse Feder, Policy Planning Advisor, and Maria Pallante, Policy Planning Advisor, who drafted the report.

I also thank Nanette Petruzzelli, Acting General Counsel, Carolina Saez, Attorney-Advisor, Office of Policy and International Affairs, Jane Bortnick Griffith, Senior Specialist in Science and Technology, Science Policy Division, Congressional Research Service, and Robert Dizard, Senior Congressional Relations Specialist, Congressional Relations Office, who read the report and offered valuable comments.

Special thanks go to Alicia Byers, Guy Echols, David Fernandez, Mary Gray, Shuli Green, Jennifer Hall, William Jebram, Sandra Jones, Patrick Kwon, Denise Prince, Angela Snow and Jerry Tuben for their efforts and expertise in editing, proofreading, typing and formatting the final report, as well as providing technical assistance.

EXECUTIVE SUMMARY

At the request of Senator Orrin Hatch, Chairman of the Senate Committee on the Judiciary, the Copyright Office has prepared a report on legal protection for databases. The report gives an overview of the past and present domestic and international legal framework for database protection. It describes database industry practices in securing protection against unauthorized use, and Copyright Office registration practices relating to databases. Finally, it discusses issues raised and concerns expressed in a series of Copyright Office meetings with representatives of a wide range of interested parties. The report does not make recommendations on either the advisability or the form of any database protection legislation; rather, it presents the issues to be addressed and some options for dealing with specific concerns.

I. COPYRIGHT PROTECTION FOR DATABASES IN THE UNITED STATES

A. Before *Feist*

Databases, or "compilations," have been protected by copyright since 1790, when the first U.S. Copyright Act was enacted. As courts applied copyright law to compilations, two distinct rationales for protection emerged. One, known as "sweat of the brow," viewed the compiler's effort and investment as the basis for copyright protection. The other, which drew on late nineteenth- and early twentieth-century case law exploring the nature of authorship in works generally, viewed the creativity and judgment of the compiler in selecting and arranging materials as the basis for protection.

Regardless of the rationale, courts gave compilations a broad scope of protection from unauthorized copying. Any copying from a protected compilation was generally held to be an infringement. Courts required a would-be competitor to go to the original sources and compile the material independently. Many cases contain statements condemning the conduct of copiers

who "reap where they have not sown," and essentially use copyright law as a means of policing unfair competition.

The 1976 Copyright Act for the first time incorporated a definition of "compilation" that requires original selection, coordination or arrangement. Courts applying the new statute, however, remained divided in their treatment of compilations. Some circuits abandoned "sweat of the brow" in favor of a unified requirement of creative originality for all works. Others continued to apply "sweat of the brow" to compilations generally, or to directories specifically.

B. The *Feist* Decision

In 1991, the Supreme Court in *Feist Publications v. Rural Telephone Service Co.* rejected the "sweat of the brow" doctrine, holding that creative originality was required by the constitutional provision empowering Congress to enact copyright laws. To be copyrightable, a compilation must evince a modicum of creativity in its selection, coordination or arrangement. The Court held that the work at issue, a white pages telephone directory, was uncopyrightable because it lacked even this modicum of creativity. The Court also made clear that the scope of protection for compilations is "thin" because it covers only the original elements of a compilation's selection, coordination or arrangement.

C. Subsequent Judicial Interpretation of *Feist*

Most cases subsequent to *Feist* have found the compilations at issue to be copyrightable. The scope of protection afforded, however, has been narrow. A number of post-*Feist* cases have held that substantial takings from copyrightable compilations did not constitute infringement, either because the defendant's compilation differed in more than a trivial degree from the plaintiff's, or because any elements of selection, coordination or arrangement that were copied were found not to constitute creative authorship.

II. DATABASE INDUSTRY PRACTICES

Database producers, motivated by the limitations in the coverage of copyright law, have adopted three main strategies to protect against unauthorized use of their products: (1) enhancing copyright protection by altering the structure or content of their databases to incorporate greater creativity; (2) increasing reliance on contracts; and (3) employing technological safeguards to prevent unauthorized access and use.

Enhancing copyright protection may entail either adding copyrightable text or altering the selection and arrangement of the database to make it more creative. Both approaches increase the likelihood that the database as a whole will be copyrightable, but are limited in their utility as means to prevent copying of the factual components of a database. In addition, depending on the type of database, these approaches may make the database more expensive to produce and/or less valuable to a user seeking a comprehensive, easy to access collection of unadorned facts.

Contracts are a major source of protection for database producers, both form contracts and negotiated agreements. They appear in a variety of print and electronic formats. Typically contracts are used to restrict access, specify permissible conditions of use, and set terms for enforcement and remedies. Different companies provide different types of price structures. It is fairly standard for producers to engage in differential pricing, charging reduced fees to non-profit and educational institutions.

Technological safeguards, while offering great promise to producers in supplementing legal protection for electronic databases, are still in the early stages of development and not yet in common use. To the extent that they are used, it is in combination with licensing and enforcement of legal rights. The technological safeguards in use today are simple or low-end measures such as passwords. More sophisticated cryptography-based systems are likely to be adopted in the near future, and used in conjunction with secure electronic transfer of funds and "click-wrap" licenses. Producers will not rely solely on technological measures, however, given

the security problems of technological "break-ins" and the inability to control subsequent use of decrypted products.

III. COPYRIGHT OFFICE REGISTRATION PRACTICES

The Copyright Office, as the government agency responsible for registering copyright claims in works of authorship, makes determinations of copyrightability on a daily basis, including for databases. In examining an application to register a database, the Copyright Office must determine whether it is a copyrightable "compilation" as defined in the Copyright Act.

The Office has always applied an originality standard in determining copyrightability. Until the late 1980s, however, it also registered compilations based on "sweat of the brow." By 1989, the Office had abandoned this standard for most compilations, continuing to apply it only to telephone books and similar directories in which some courts were still upholding copyrightability.

Automated databases have raised some special issues, including the status of ongoing updates or other changes. To the extent that each update contains copyrightable subject matter, it may be registered. In response to database producers' practical concerns, the Copyright Office in 1989 adopted a regulation allowing group registration of updates for both published and unpublished automated databases.

The 1991 *Feist* decision gave the Copyright Office clear authority to reject works for which protection was claimed solely on the basis of "sweat of the brow." The Office revisited its examining practices for compilations and issued new guidelines in 1991. It concluded that most compilations would meet the standard of originality required by *Feist*. The guidelines did, however, require extra scrutiny for certain categories of compilations, including telephone directories. The Office continues to register most claims submitted for compilations.

IV. THE INTERNATIONAL CONTEXT

A. International Treaties

Databases have also been the subject of attention in the international arena. Their status as copyrightable subject matter is guaranteed by the two major multilateral treaties relating to copyright: the Berne Convention for the Protection of Literary and Artistic Works and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). The TRIPs Agreement requires World Trade Organization member countries to protect "compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations." A similar obligation is contained in the World Intellectual Property Organization (WIPO) Copyright Treaty concluded in Geneva in December 1996, which has not yet become effective.

B. European Database Directive

In March 1996, the European Union adopted a directive to the member states on the legal protection of databases. The directive must be implemented by member states in their national legislation by January 1, 1998.

The database directive covers compilations of data in any form, including hard-copy as well as electronic databases. It establishes a dual structure for database protection. One component is copyright protection for the structure of the database. The other is a new "*sui generis*" property right in the contents of the database.

The copyright portion of the directive seeks to harmonize the scope of copyright protection for databases throughout the European Union. It does so in two major respects. First, it sets a uniform standard of originality, protecting databases that, by reason of the selection or arrangement of their contents, constitute an author's own intellectual creation. This is a higher

standard of originality than is currently employed in the United Kingdom, Ireland and the Netherlands, but lower than is generally found in Continental "author's right" systems.

Second, the directive establishes a uniform list of rights and exceptions to rights. These rights are reproduction, adaptation, distribution, and communication, display or performance to the public. Lawful users are permitted to engage in acts necessary for purposes of access to and normal use of a database's contents. Member states may also provide certain exceptions in their national laws for private copying, illustration for teaching or scientific research, use for public security or administrative or judicial procedures, or other traditional copyright exceptions. The exceptions may not, however, "unreasonably prejudice the rightholder's legitimate interests or conflict with normal exploitation of the database."

The *sui generis* right under the directive protects against unauthorized extraction or re-utilization of all or a substantial part of the contents of a database. It is similar to the Nordic countries' "catalogue rule," which provides a short term of protection against unauthorized reproduction of catalogues of information. Insubstantial parts are excluded from protection. The directive contains a list of exceptions that member states may adopt, similar to those permitted for copyright, and a general prohibition against users engaging in acts that "conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database." The term of protection is fifteen years. Any qualitatively or quantitatively "substantial change," including one resulting from an accumulation of small changes, "which would result in the database being considered to be a substantial new investment," qualifies the resulting database for its own fifteen-year term of protection. The right is available only to database makers who are EU nationals or habitual residents. The EU has indicated that it will agree to extend protection to nationals of third countries only where the third country offers comparable protection to EU databases.

An early version of the directive included a compulsory license for sole source databases. As part of an overall compromise, this provision was deleted. The directive notes the important role of competition policy in the database area, and establishes a review procedure to determine the effect of the *sui generis* right on free competition.

One member state has already enacted implementing legislation; most others expect to meet the January 1, 1998 deadline.

C. Proposed WIPO Treaty

In 1996, proposals for a treaty on the protection of databases were submitted to the World Intellectual Property Organization (WIPO) by the EU and the United States. A draft treaty based on these proposals was prepared for consideration at the WIPO Diplomatic Conference held in Geneva in December.

The proposed treaty would have obligated signatory countries to protect databases in any form or medium, based on a "substantial investment in the collection, assembly, verification, organization or presentation" of the contents. It would have protected against the extraction or utilization of all or a substantial part of a protected database's contents for a period of either 15 or 25 years, with new terms attaching upon any substantial change qualifying as a new substantial investment. Countries would have been permitted to adopt exceptions to the right, provided that they did not conflict with a normal exploitation of the database and did not unreasonably prejudice the interests of the right holder. The treatment of government databases would have been left up to each individual country.

The draft treaty proved controversial within the United States. It was never reached or discussed in substance at the December 1996 Diplomatic Conference. The general subject of database protection will be discussed at an informational meeting at WIPO in September 1997. The draft treaty itself is not scheduled to be the topic of debate.

V. PRIOR CONGRESSIONAL CONSIDERATION

In May 1996, Congressman Carlos Moorhead, then Chairman of the House Subcommittee on Courts and Intellectual Property, introduced H.R. 3531, the "Database Investment and Intellectual Property Antipiracy Act of 1996." No hearings were held on the bill, and no corresponding bill was introduced in the Senate.

The bill would have made unlawful the unauthorized extraction, use or re-use of all or a substantial part of the contents of a protected database. To qualify for protection, a database would have to result from a substantial investment of resources in the collection, assembly, verification, organization or presentation of its contents. Databases made by a governmental entity were excluded from protection. The bill contained an exception for extraction or use of insubstantial parts of the database for any purpose, subject to a restriction on the repeated or systematic taking of insubstantial parts in a manner that affected the database's market. It also contained a provision stating that nothing in the bill prevented a person from independently collecting, assembling or compiling from other sources any of the material contained in a database. The term of protection was 25 years, but with the ability to obtain a new term upon "any change of commercial significance."

Similar concerns were expressed about H.R. 3531 to those expressed about the proposed WIPO treaty. Many of the same groups urged that all interested parties be given an opportunity to provide input and that a thorough analysis of the issues be undertaken.

VI. COPYRIGHT OFFICE MEETINGS

In order to obtain a better understanding of the issues, and to provide Congress with complete and balanced information, the Copyright Office scheduled meetings with a broad spectrum of interests. From March through June 1997, the Office held sixteen meetings with groups or individuals with an interest in the subject of database protection, including

representatives of the library community, science agencies and organizations, educational groups and database producers. The meetings were led by Marybeth Peters, Register of Copyrights, with the assistance of the Office of Policy and International Affairs. The Copyright Office made clear that it was working from a clean slate, rather than assuming that any of last year's proposals would be the starting point for congressional consideration.

The meetings indicated general agreement as to certain basic principles: (1) databases are vulnerable to copying, and adequate incentives are needed to ensure their continued creation; (2) individual facts should not be the subject of private ownership; (3) anyone should be free to obtain facts independently from original sources, even after they have been incorporated in a database; (4) government databases should not be protected; (5) it is important not to harm science, research, education and news reporting; and (6) "free riding" in the form of substantial copying for commercial, competitive purposes should not be permitted.

Some participants held strong views either in favor of new legislation or in opposition. In general, many members of the library and science communities, as well as some educational groups, telephone companies and Internet-related businesses, expressed opposition, while a majority of database producers advocated legislation. However, positions were not uniform within all of these groups. A large number of the participants in the meetings were undecided, or took neutral or intermediate positions.

Proponents of new legislation make the following principal points: (1) databases are increasingly important to the U.S. economy and to science; (2) they require large investments of time and money to produce and maintain; (3) copying and dissemination of databases is increasingly cheap; (4) existing law is inadequate to protect databases; (5) a lack of adequate legal protection will diminish investments in producing and maintaining databases, to the detriment of the public; and (6) legislation can be crafted so as to provide adequate legal protection without harming the legitimate interests of users.

Opponents of new legislation make the following principal points: (1) proponents have not produced sufficient evidence that a problem exists that requires a legislative solution; (2) the combination of legal, contractual and technological protections available today is adequate; (3) the U.S. database industry is thriving under the existing legal regime; (4) it is critical to proceed with great caution in this area given the risk of unintended negative consequences, such as less accessible or more expensive data; and (5) copyright law strikes an appropriate balance between incentives for creation and the free flow of information. In addition, some in the scientific community have raised concerns about the impact of any new protection on the policy of full and open access to data that the United States has strongly pursued in the international arena.

VII. ISSUES

Most of the substance of the discussions at the Copyright Office meetings can be grouped under one of six topics: (1) as a threshold question (determining whether it is necessary to reach the other issues), whether additional legal protection for databases is needed; (2) what form it should take, whether a new form of property right or a tort concept closer to unfair competition; (3) how critical concepts such as "database," "substantial investment," and "substantial" or "insubstantial part" should be defined; (4) how it can be ensured that public interest uses of information are not harmed by new protection; and (5) what should be the duration of any such protection; and (6) how "sole source" data should be handled. One additional issue would also need to be examined: what constitutional constraints may limit Congress's ability to legislate in this area.

A. Need for Protection

All agree that the proponents of a new form of statutory protection have the burden of establishing the need for such protection. Views differ sharply, however, as to the type and

degree of proof required to satisfy this burden. The options proposed ranged from a threat of future harm to empirical data generated through broad-scale studies.

Much of the discussion in the meetings focused on whether the combination of existing sources of protection--copyright law, contracts, state misappropriation doctrine, trade secrecy, trademark law, and technological safeguards–is sufficient to provide incentives to produce a wide variety of databases.

Proponents assert that it is not sufficient, based on the following analysis: Since the *Feist* decision, copyright protection for databases has been limited, and in a number of cases database producers have been unable to obtain relief from the courts against substantial, competitive copying. Trade secrecy is largely unavailable for databases made available to the public or exploited commercially. Trademark law protects only "brand name" databases, and only against uses that involve the trademark and confuse the consumer as to the origin of the database. Contracts, while an effective means of protection, are not binding on third parties. Remedies for breach of contract may not be satisfactory, and contract law may differ in different jurisdictions. In addition, the scope of enforceability of database contracts is not well-settled, and has generated controversy. Misappropriation is not a well-defined doctrine and varies from state to state. As set out in recent case law, the doctrine has various shortcomings from a producer's perspective. Finally, technological measures can be a useful adjunct to legal protection for electronic databases, but they are still in early stages of development, are vulnerable to technological circumvention, and do not prevent reuse of a database once it is available in accessible form.

Opponents believe that current copyright law is adequate and appropriate, as supplemented by other existing forms of protection. Some stress the fact that few databases have been held unprotectible, and view the scope of protection provided by the courts to be appropriate in light of the public interest in access to information. They see contract protection

as highly effective, question the seriousness of the privity problem given the importance of timely updates for many databases, and note that Congress can consider the issue anew if the law on enforceability of contract terms develops in a different direction. They view the misappropriation doctrine as a strong means of protection, targeting the type of conduct most likely to cause meaningful commercial harm, while avoiding an impact on beneficial, public interest types of uses. They urge that Congress not step in prematurely, since the courts are so far interpreting that doctrine reasonably. Finally, they assert that technological protection has the potential to be extremely effective, easier and more economical to rely on than legal rights, and could make additional legal protection unnecessary as a practical matter.

One final aspect of the asserted need for new legislation relates to the international context. Proponents point to the recent EU database directive, which effectively conditions protection for non-EU databases on the availability of comparable protection in the given database's country of origin. They assert that as of 1998, when the directive's requirements take effect, their lack of *sui generis* protection will leave American database producers at a competitive disadvantage in Europe, one of their biggest markets. They predict that U.S. producers will need to adopt more restrictive contracts than their foreign competitors, and will not be able to operate safely in those jurisdictions where their contracts may not be respected. If they avail themselves of the directive's alternate route to protection by establishing a commercial presence within the EU, proponents argue that the result will be a loss of jobs in the United States, with a corresponding detriment to the U.S. economy.

Opponents state that the United States should not follow Europe but should take the lead in establishing appropriate intellectual property policy, particularly in areas relating to the use of government data, where the U.S. approach has historically differed from that of many European nations. Some also caution that the United States should not send the wrong signal to other countries, encouraging them to allow control of access to information in a time of increasing

C. Definitions

During the meetings, there was extensive discussion of the definitions used in the draft WIPO treaty and in last year's bill, particularly the definitions of "database," "substantial investment," and "substantial part" or its converse, "insubstantial part."

The definition of "database" raises the issue of the subject matter to be protected. It is important to define the subject matter in such a way as not to sweep too broadly, and cover material that is not intended to be covered. Among the types of materials mentioned were scientific papers, computer programs, web sites, interface specifications, and videotapes or digital video disks. Many pointed out that it is difficult to articulate a precise enough definition; some believed it to be impossible. The scientific and educational communities stressed the need to ensure that government data did not fall within the definition of protected subject matter.

The definition of "substantial investment" raises the issue of the criterion for protection. What kind of investment, and how much, should be required? A number of participants stressed that significant added value should be required in order to obtain rights.

The definition of "substantial part," or its converse, "insubstantial part," raises the issue of the scope of protection. Excluding insubstantial parts from protection is critical in ensuring that ordinary consumer or research use involving the extraction of particular items of interest will be permissible without the need to obtain consent. In several of the meetings, concern was expressed about the vagueness of these terms and about the possible impact on news gathering and educational activities if protection is provided against the accumulation of a number of insubstantial parts.

A few participants in the meetings suggested that some or all of the definitional questions could be avoided if an unfair competition model was chosen rather than a property rights model.

budgetary constraints and commercialization of scientific data. They assert that implementation of the database directive will leave U.S. producers no worse off in Europe than they are today, and question predictions of a meaningful competitive disadvantage. Finally, they suggest that the directive's failure to provide national treatment may be challenged on various grounds.

B. Form of Any New Protection

Two basic models have been proposed for the form of any new protection: (1) an exclusive property right; or (2) some form of unfair competition law, focusing on the nature of the conduct prohibited.

The choice between the two models has many ramifications. Depending on how it is drafted, an unfair competition model could obviate the need for definitions, for exceptions, or for a defined term of protection. As to international consequences, an approach that differed significantly from the model of the European directive might not trigger reciprocal protection. Finally, the two models may have differing constitutional implications. Much would turn, however, on the precise delineation of either approach--how the scope of the rights are defined, or what conduct is proscribed.

Proponents prefer the property rights model, in part because of the predictability and transferability of rights, and the potential for serious damage to the market for a database even without the elements of competition or profit.

Among the opposing groups, and some neutral groups with specific concerns, there was a strong preference for the unfair competition model. A few participants sought as much specificity as possible, and wished to avoid the uncertainty inherent in a general prohibition against conduct determined to be unfair.

D. Public Interest Uses

Many participants identified certain activities with public interest elements that they urged should be allowed to continue without new restrictions on the ability to use data or new costs in doing so–primarily scientific, research and educational activities and news reporting.

Analytically, there are various ways in which this concern could be addressed. One possibility relates to the form of protection chosen; depending on how it is articulated, a statute based on unfair competition is likely not to cover many such activities. If a property rights model is chosen instead, the scope of the rights granted could be drafted so as to exclude such activities as appropriate.

The exclusion from protection of insubstantial portions of a database helps but does not fully resolve the problem. In some circumstances users such as scientists or reporters need to extract substantial portions or all of a database in order to analyze its contents and draw conclusions.

Another possibility would be to provide an explicit exception or exceptions to cover those activities that Congress decides should be permitted without the need to obtain authorization. This could be accomplished through a broad, general exception similar to the fair use defense in copyright law; through detailed, specific exceptions more like the exceptions to a copyright owner's rights embodied in sections 108-121 of the Copyright Act; or through a combination of the two approaches.

Finally, some have suggested the possibility of compulsory licenses for certain socially favored types of uses, in order to ensure the availability of data at a reasonable price. As a general rule, compulsory licenses are not favored in intellectual property law, which ordinarily relies on the free market. In some circumstances, however, Congress has found such licenses appropriate, typically where there is a new, struggling industry that Congress decides to assist, or some practical difficulty in achieving a negotiated solution.

This leads to the question of whether the marketplace can appropriately handle non-profit scientific and educational uses. Some databases are produced specifically for this market; others have both commercial and non-profit uses. Many database producers today engage in differential pricing. It is unclear whether or not enacting a new form of protection would alter this practice, or tend to raise prices.

E. Duration

In theory, protection should last just long enough to provide adequate incentives by allowing a fair return on investment. The difficulty lies in determining how long that period is, devising a term that works across the board to encourage the production of all types of databases.

A number of possibilities have been suggested for the basic, initial term, ranging from a maximum of 25 years to a variable term lasting as long as the data has value or is "hot"—i.e., new and timely. The more difficult question is the extent to which changes made in a database, for example in the process of updating or verifying its contents, should result in a new term of protection. Proponents of legislation argue that the same policy justifications for providing incentives to create databases also apply with respect to incentives to keep existing databases comprehensive, timely and accurate. Concerns have been expressed, however, that the result could be perpetual protection; as long as a database continued to be updated, new terms of protection could attach *ad infinitum*.

One way to avoid perpetual protection might be to make explicit in any database legislation that the term of protection for the preexisting database is not extended when a new term attaches to a changed version. This would clarify the problem conceptually, and ensure that protection would expire in due course for the old version of the database. As a practical matter, this solution will work for databases that remain available in their original form. Databases available only on-line, however, may be constantly refreshed and not available to the public in

their older form. Moreover, it may be impossible to determine which aspects of the database are new and which aspects were found in the prior version.

It has been suggested that this issue too might be resolved by the choice of an unfair competition model rather than a property rights model, with protection existing for as long as an investment of continued value is taken unfairly.

F. Sole Source Data

In theory, the answer to many of the concerns that have been expressed about restricting the availability of data is that, regardless of what model of protection is chosen, the database producer would not own the data in itself. Anyone would remain free to obtain all of the same data from other sources.

Nevertheless, there are circumstances in which this answer alone may be unsatisfactory. When the data is not available elsewhere, the ability to prevent its extraction from the database may in effect amount to ownership of the data itself. The two prototypical examples of "sole source" data are (1) government data provided to a private producer on an exclusive basis; and (2) data generated by the database maker itself, such as telephone subscriber information. Unless the producer chooses to make such data freely available, it will not be possible for anyone else to obtain it independently.

A variety of mechanisms have been proposed to deal with sole source databases. Broadly categorized, they are: exclusions from protection; compulsory licenses; and regulation through other bodies of law such as antitrust or industry-specific government oversight. A combination of these approaches could also be considered, allowing greater fine-tuning to the nature of the database and its market.

A complete exclusion from protection is the most drastic approach, implying a policy decision not to provide such an incentive for that type of database, and the absence of suitable,

less drastic alternatives to ensure the availability of data. The least controversial case for an exclusion is the category of government data made available to the database producer on exclusive terms. Although it is generally unlawful for federal agencies in the United States to enter into such agreements, in cases not covered by this law the policy favoring free access to government data could be undermined if a single entity had the right to control access to data unavailable elsewhere.

The compulsory license approach may be seen as a middle ground, allowing producers to benefit financially from the use of their products but removing their ability to control the nature or price of the use. Compulsory licenses are generally disfavored in intellectual property law, however, and adopted only as a last resort in circumstances where the free market does not function well.

The third possibility is to deal with this issue as a question of appropriate government control of business activities. This could be done through the application of antitrust law generally, or through regulation of a particular industry, such as through the Federal Communications Commission for the telecommunications industry or through the Securities Exchange Commission for securities markets.

Finally, arguments have been made for special treatment of databases which are not literally sole sources, but may be the only economically feasible sources of particular data. This may be the case where the data requires substantial time and effort to obtain, or the database has a narrow niche market and no other producer has the resources or ability meaningfully to compete with a first comer. Such databases appear to present somewhat different policy questions than literally sole source databases. It is unclear whether granting new legal protection would change the nature of existing markets, either exacerbating a lack of competition or encouraging more.

On the sole source issue too, the form and scope of any new protection may be key.

G. Constitutionality

Two primary constitutional issues also require consideration: (1) possible constraints imposed on Congressional power to legislate in this area by the language of the Copyright Clause and (2) First Amendment limitations.

1. Copyright Clause

The Copyright Clause imposes certain restrictions on Congress's ability to enact copyright legislation. Copyrights cannot be of indefinite duration, but can only be granted "for limited times." In addition, the Supreme Court in *Feist* held that Congress could not constitutionally provide copyright protection based on "sweat of the brow," but could only protect works of authorship embodying a modicum of creativity. The questions are then whether Congress can provide protection for "sweat" or investment without creativity under a different Article I power, most likely under the Commerce Clause, and whether any such protection must incorporate a limited term. The answers to these questions may depend on the form of protection that is chosen. If database legislation appears to be the equivalent of copyright under another name, but providing protection to uncopyrightable subject matter for unlimited times, the use of a different label and the recitation of a different constitutional basis will not alone be sufficient to save it. To the extent that the legislation promotes different policies from copyright, and does so in a different manner, it is similar to trademark law, and therefore seems likely to survive a constitutional challenge. The more the statute differs from copyright, the more likely it is to be constitutional.

2. First Amendment

The First Amendment must also be kept in mind in considering any new database protection legislation that may restrict the communication of facts. The courts have held that copyright law accommodates First Amendment values through the idea/expression dichotomy and the fair use doctrine. Depending on the model chosen and the formulation adopted for any

database legislation, an explicit statutory provision clarifying that individual facts are not protected might assist in resolving First Amendment concerns. If individual facts remain free to be used for purposes of expression, there may be little need to copy a substantial portion of an entire database. To the extent that making a statement requires the use of more than a few facts, the form of protection and the nature and scope of the statutory exceptions would be highly relevant.

TABLE OF CONTENTS

I. COPYRIGHT PROTECTION FOR DATABASES IN THE UNITED STATES 3
- A. Before *Feist* 3
- B. The *Feist* Decision 7
- C. Subsequent Judicial Interpretation of *Feist* 10
  - 1. Copyrightability 10
  - 2. Scope of Protection 13

II. DATABASE INDUSTRY PRACTICES 19
- A. Enhancing Copyright Protection 20
  - 1. Adding Copyrightable Text 20
  - 2. Making the Database More Creative 21
- B. Contractual Protection 22
  - 1. Terms of Use 23
  - 2. Pricing 25
- C. Technological Safeguards 26

III. COPYRIGHT OFFICE REGISTRATION PRACTICES 29
- A. Registration Generally 30
- B. Pre-*Feist* Practices 32
  - 1. Databases and the Rule of Doubt 32
  - 2. 1988 and 1989 Interim Guidelines for Database Registration 33
  - 3. Registration of Automated Databases 34
- C. Post-*Feist* Practices 36

IV. THE INTERNATIONAL CONTEXT 39
- A. International Treaties 39
- B. European Database Directive 40
  - 1. Background 40
  - 2. Copyright Protection 42
  - 3. *Sui Generis* Protection 45
  - 4. Current Status of Implementation 50
- C. Proposed WIPO Treaty 50

V. PRIOR CONGRESSIONAL CONSIDERATION 57

VI. COPYRIGHT OFFICE MEETINGS 63
- A. Procedure 63
- B. Overview of Positions 64

VII. ISSUES 71
- A. General 71
- B. Is There a Need for Additional Protection? 72

1. General 73
2. Copyright 74
3. Trade Secrets 76
4. Trademark 77
5. Contracts 78
6. Misappropriation 82
7. Technological Protection 85
8. International Considerations 86
C. Form of Any New Protection 89
D. Definitions 92
E. Public Interest Uses 96
F. Duration 98
G. Sole Source Data 102
H. Constitutionality 107
1. Copyright Clause 108
2. First Amendment 110

APPENDICES

APPENDIX A: Copyright Office Circular 65

APPENDIX B: European Database Directive

APPENDIX C: Proposed WIPO Database Treaty

APPENDIX D: Database Investment and Intellectual Property Antipiracy Act of 1996, H.R. 3531, 104th Cong., 2d Sess. (1996)

APPENDIX E: Copyright Office Database Meeting Participants

U.S. COPYRIGHT OFFICE

REPORT ON LEGAL PROTECTION FOR DATABASES

August 1997

Introduction

Databases have always been commodities of both commercial value and social utility, ranging from their early incarnation in the eighteenth century as directories compiled by walking door to door to the late twentieth-century compendiums of millions of items in electronic form. The question of whether and how databases should be protected by the law has never been easy, as it necessarily involves finding a balance between two potentially conflicting societal goals: the goal of providing adequate incentives for their continued production, and the goal of ensuring public access to the information they contain. At different points in time, and in different societies, that balance has been struck in different ways.

In the past few years, the issue has taken on new urgency due to changes in the legal, technological and international landscape. The major landmarks among these changes have been the U.S. Supreme Court's 1991 decision in *Feist Publications v. Rural Telephone Service Co.*; rapid developments in the technologies for collecting, organizing, reproducing and disseminating information; and the actions of the European Union in harmonizing the laws of its member states. As a result, 1996 saw the consideration of proposals for a new form of protection for databases, both in the World Intellectual Property Organization and in the U.S. Congress. The discussions sparked a heated debate in the United States, involving a broad spectrum of interests.

In early 1997, the Copyright Office initiated its own examination of database protection by scheduling meetings with several groups that had expressed opposition to the 1996 proposals,

in order to gain a clearer understanding of their concerns. In April, Senator Orrin G. Hatch, Chairman of the Senate Committee on the Judiciary, requested that the Office broaden its meetings to include a wide range of interested parties, and report to the Judiciary Committee on the outcome in order to assist in the Committee's consideration of the subject. Since that time, the House Subcommittee on Courts and Intellectual Property, chaired by Rep. Howard Coble, has also asked to see the report in connection with its own consideration.

The purpose of this report is to provide some background and context to the subject of database protection, to identify and clarify the issues involved, and generally to lay the initial groundwork for a Congressional determination of appropriate legislative policy. The report is divided into seven substantive sections: (1) an historical overview of copyright protection for databases in the United States; (2) a description of database industry practices in securing protection against unauthorized use; (3) a description of Copyright Office registration practices relating to databases; (4) a summary of the relevant international context, focusing on the European database directive and the draft WIPO treaty on the protection of databases; (5) a summary of prior Congressional consideration of the subject; (6) a description of the methodology and substance of the meetings held by the Copyright Office; and (7) a discussion of the issues presented.

The report does not make recommendations on either the advisability or the form of any database protection legislation. At this point, we seek only to present the issues to be addressed, and to offer some options for addressing specific concerns. Their resolution will await public hearings and the presentation of evidence.

I. COPYRIGHT PROTECTION FOR DATABASES IN THE UNITED STATES

A. Before *Feist*

In the terminology of copyright law, a database is a "compilation": "a work formed by the collection and assembling of preexisting materials or of data . . . ."[1] Compilations constitute one of the oldest forms of authorship protected under U.S. law, dating back to the eighteenth century.[2] Compilations were protected as "books" under the first federal copyright statute.[3]

Over the course of the nineteenth century two rationales developed for protecting compilations under copyright. One rationale, which has come to be known as the "sweat of the brow" doctrine, focused on the effort and investment of the compiler. The other focused on the compiler's judgment and creativity in the selection and arrangement of the materials comprising the compilation.

The earliest compilation cases that discussed the basis for copyright protection identified the compiler's effort — "his own expense, or skill, or labor, or money"[4] — as the critical contribution justifying protection.[5] These cases, involving works ranging from law reports and

---

[1] 17 U.S.C. § 101.

[2] *See, e.g.*, Kilty v. Green, 4 H. & McH. 345 (Gen. Ct. Md. 1799) (denying relief in case involving compilation of statutes).

[3] Copyright Act of May 31, 1790, ch. 15, 1 Stat. 124 (protecting books, maps and charts).

[4] Emerson v. Davies, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845).

[5] *See, e.g.*, Dun v. Lumbermen's Credit Assoc., 144 F. 83 (7th Cir. 1906), *aff'd*, 209 U.S. 20 (1908); West Pub. Co. v. Lawyers' Co-operative Pub. Co., 79 F. 756 (2d Cir. 1897); West Pub. Co. v. Edward Thompson Co., 169 F. 833 (C.C.E.D.N.Y. 1909), *modified*, 176 F. 833 (2d Cir. 1910); Egbert v. Greenberg, 100 F. 447 (C.C.N.D. Cal. 1900); Ladd v. Oxnard, 75 F. 703 (C.C.D. Mass. 1896); American Trotting Register Assoc. v. Gocher, 70 F. 237 (C.C.N.D. Ohio 1895); Hanson v. Jaccard Jewelry Co., 32 F. 202 (C.C.E.D. Mo. 1887); Chapman v. Ferry, 18 F. 539 (C.C.D. Oreg. 1883); Banks v. McDivitt, 2 F. Cas. 759, 13 Blatchf. 163 (C.C.S.D.N.Y. 1875); Webb v. Powers, 29 F. Cas. 511 (C.C.D. Mass. 1847); Emerson v. Davies, 8 F. Cas. 615 (C.C.D. Mass. 1845); Gray v. Russell, 10 F. Cas. 1035 (C.C.D. Mass. 1839).

legal encyclopedias to compilations of war records, emphasized both the compilers' effort and the copiers' "unfair use of the copyrighted work, in order to save themselves the time and labor of original investigation."[6] Contemporary treatises echoed this approach.[7]

During the late nineteenth century courts began to articulate a basis for copyright protection generally that differed from the labor/investment approach taken in cases involving compilations. In a series of decisions from 1879 to 1903, the Supreme Court held that the "writings" that could be protected under the copyright clause of the Constitution included "only such as are original,"[8] and indicated that creativity is a component of originality.[9] Under this approach, copyright was described as protecting writings that are "the fruits of intellectual labor,"[10] "productions of intellect or genius"[11] or "original intellectual conceptions of the author."[12]

The evolving doctrine of originality was applied by some courts in compilation cases, particularly cases involving compilations of textual materials such as law books. These cases identified the author's critical contribution justifying protection as his judgment in selecting and

---

[6] *West Pub. Co.*, 79 F. at 772.

[7] *See, e.g.*, EATON S. DRONE, A TREATISE ON THE LAW OF PROPERTY IN INTELLECTUAL PRODUCTIONS IN GREAT BRITAIN AND THE UNITED STATES 386 (1879); GEORGE T. CURTIS, TREATISE ON THE LAW OF COPYRIGHT 174 (1847).

[8] *In re* The Trademark Cases, 100 U.S. 82, 94 (1879).

[9] Bleistein v. Donaldson Lithographing Co., 188 U.S. 239 (1903); Higgins v. Keuffel, 140 U.S. 428 (1891); Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884); *In re* The Trademark Cases, 100 U.S. at 94. *See also* National Tel. News Co. v. Western Union Tel. Co., 119 F. 294 (7th Cir. 1902); Boucicault v. Fox, 3 F. Cas. 977, 5 Blatchf. 87 (C.C.S.D.N.Y. 1862); Reed v. Carusi, 20 F. Cas. 431 (C.C.D. Md. 1845).

[10] *In re* The Trademark Cases, 100 U.S. at 94. *See also Higgins*, 140 U.S. at 431.

[11] American Tobacco Co. v. Werckmeister, 207 U.S. 284, 291 (1907).

[12] *Burrow-Giles*, 111 U.S. at 59-60. *See also* WILLIAM W. ELLSWORTH, A COPY-RIGHT MANUAL 10 (1862) (stating "mere mechanical labor will not suffice; intellectual labor or invention is indispensable").

arranging materials.[13] This approach coexisted with, rather than supplanted, sweat of the brow cases. Sweat of the brow was applied to cases involving purely factual compilations, such as catalogs and directories. Sometimes the two approaches appeared to be melded together in a single case, with the court focusing on the "labor" and "skill" contributed by the author.[14] With very few exceptions, one or the other approach was drawn upon by the court to support the conclusion that a particular compilation was protectible, rather than to deny protection.

On the question of the *scope* of protection afforded to compilations, there was somewhat greater uniformity in the case law. In compilation cases, regardless of the theoretical framework adopted to justify copyright protection, once the plaintiff's work was determined to be copyrightable, courts generally held a defendant to have infringed whenever material was copied from the plaintiff's work. Typically there was no inquiry as to whether the particular material copied was protected by the plaintiff's copyright. To avoid infringement, a second-comer was required to go to the original sources and compile the material independently, without reference to the earlier work.[15] A common thread running through many of these decisions was the court's desire to prevent the copier from competing unfairly with the compiler by appropriating the fruits of the compiler's efforts or creativity. In this sense, courts treated copyright protection for compilations much like a branch of unfair competition law.

---

[13] *See, e.g.*, Edward Thompson Co. v. American Lawbook Co., 122 F. 922, 924 (2d Cir. 1903) (focusing on "skill and taste of the [plaintiff] in selecting or arranging" materials); Lawrence v. Dana, 15 F. Cas. 26, 28, 4 Cliff. 1 (C.C.D. Mass. 1869) ("copyright may justly be claimed by an author of a book who has taken existing materials from sources common to all writers, and arranged and combined them in a new form, and given them an application unknown before, for the reason that, in so doing, he has exercised skill and discretion in making the selections, arrangement, and combination . . . .").

[14] *See, e.g.*, Hanson v. Jaccard Jewelry Co., 32 F. 202, 203 (C.C.E.D. Mo. 1887).

[15] *See, e.g.*, Williams v. Smythe, 110 F. 961 (C.C.M.D. Pa. 1901); List Publishing Co. v. Keller, 30 F. 772 (C.C.S.D.N.Y. 1887); *Banks*, 2 F. Cas. 759.

The Copyright Act of 1976 included a definition of "compilation" which, for the first time, drew an express statutory connection between compilations and "original works of authorship":

> A "compilation" is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works.[16]

The definition compels a court to examine the nature of a compilation's "selection, coordination, or arrangement" in order to determine whether the compilation is "an original work of authorship" protectible under section 102(a). In other words, the same originality requirement applies to compilations as to all other works.

A separate section clarified the scope of protection for compilations, specifying that

> The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material. The copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material.[17]

The 1976 Act also codified the idea/expression dichotomy that had been developed by the courts.[18] Section 102(b) provides: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or

---

[16] 17 U.S.C. § 101. *See also id.*, definition of "collective work."

[17] 17 U.S.C. § 103(b).

[18] *See* Baker v. Selden, 101 U.S. 99 (1879).

embodied in such work." This language has been interpreted to exclude protection for facts as well.[19]

Cases under the 1976 Act were divided about the continuing viability of the sweat of the brow doctrine. Some circuits continued to apply sweat of the brow.[20] Other circuits rejected sweat of the brow, requiring instead that compilations contain sufficient creativity in their "selection, coordination or arrangement" to render them "original works of authorship" entitled to copyright protection.[21] On both sides of this doctrinal divide, however, there was a consistent line of cases upholding the copyrightability of directories.[22] The stage was thus set for Supreme Court consideration of the issue when it granted certiorari in a Tenth Circuit case routinely applying the sweat of the brow doctrine to protect a white pages telephone directory against wholesale copying.[23]

B. The *Feist* Decision

The Supreme Court sounded the death knell for the sweat of the brow doctrine in *Feist Publications v. Rural Telephone Service Co.*[24] In finding a white pages telephone directory to be

---

[19] *See* Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985); Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991).

[20] *See, e.g.*, Illinois Bell Tel. Co. v. Haines & Co., 683 F. Supp. 1204 (N.D. Ill. 1988), *aff'd*, 905 F.2d 1081 (7th Cir. 1990), *vacated and remanded*, 499 U.S. 944 (1991); Rural Tel. Serv. Co. v. Feist Publications, Inc., 916 F.2d 718 (10th Cir. 1990).

[21] *See, e.g.*, Financial Info., Inc. v. Moody's Investors Serv., Inc., 808 F.2d 204 (2d Cir. 1986), *cert. denied*, 484 U.S. 820 (1987); Eckes v. Card Prices Update, 736 F.2d 859 (2d Cir. 1984); Worth v. Selchow & Righter Co., 827 F.2d 569, 572-73 (9th Cir. 1987).

[22] *See, e.g.*, Hutchinson Tel. Co. v. Fronteer Directory Co. of Minnesota, 770 F.2d 128 (8th Cir. 1985); Southern Bell Tel. and Tel. Co. v. Associated Tel. Directory Publishers, 756 F.2d 801 (11th Cir. 1985).

[23] Feist Publications, Inc. v. Rural Tel. Serv. Co., 916 F.2d 718 (10th Cir. 1990), *cert. granted*, 498 U.S. 808 (1990).

[24] 499 U.S. 340 (1991).

uncopyrightable, the Court held that the sole basis for protection under U.S. copyright law is creative originality.

The plaintiff, Rural Telephone Service Co. (Rural), was a local telephone company that produced a white-pages telephone directory covering its service area. Feist Publications (Feist), the defendant, published a directory covering multiple service areas. After Feist sought, and was refused, a license to the listings in Rural's directory, it copied the listings without authorization. The district court found Feist liable for infringement, and the Tenth Circuit affirmed in an unpublished memorandum decision. The Supreme Court granted certiorari, presumably to resolve the split in the circuits.[25]

The Court reviewed the history of compilation copyright and the development of the sweat of the brow doctrine. It repudiated the doctrine in unequivocal terms:

> Originality, the Court held, has two distinct components: "independent creation plus a modicum of creativity."[26] The Court emphasized that the creativity component is extremely modest. "To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, 'no matter how crude, humble or obvious' it might be."[27]

The Court reviewed the definition of "compilation" in the Copyright Act of 1976 and discerned an intent to overrule the sweat of the brow doctrine by legislation. By defining a compilation as "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship,"[28] the Court explained, Congress specifically required

---

[25] 498 U.S. 808 (1990).

[26] *Id.* at 346.

[27] *Id.* at 345 (citation omitted).

[28] 17 U.S.C. § 101.

originality in order to protect compilations, and described the elements of authorship that are protected in a compilation: the selection, coordination and arrangement of the underlying material.[29]

The Court did not limit its holding to statutory interpretation, however. It held that "[o]riginality is a constitutional requirement."[30] Citing nineteenth-century case law, the Court derived this requirement from the Constitutional terms "Writings" and "Authors" in the grant of authority to Congress to enact copyright laws.[31]

On the facts before it, the Court held that Rural's white pages telephone directory was uncopyrightable.

> The selection, coordination, and arrangement of Rural's white pages do not satisfy the minimum constitutional standards for copyright protection. . . . Rural's white pages are entirely typical. . . . In preparing its white pages, Rural simply takes the data provided by its subscribers and lists it alphabetically by surname. The end product is a garden-variety white pages directory, devoid of even the slightest trace of creativity.[32]

Rural's selection of listings was "obvious," and its arrangement was "not only unoriginal, it [was] practically inevitable."[33] The Court acknowledged that the telephone white pages were an extreme case, falling in "a narrow category of works in which the creative spark is utterly lacking

---

[29] *Feist*, 499 U.S. at 356-58.

[30] *Id.* at 346.

[31] *Id.* (quoting U.S. Const., art. I, § 8, cl. 8). The Court hinted, however, that other forms of protection may not be subject to the same constitutional restriction. *See id.* at 354 ("Protection for the fruits of such research . . . may in certain circumstances be available under a theory of unfair competition") (quoting DAVID NIMMER & MELVILLE B. NIMMER, NIMMER ON COPYRIGHT § 3.04 (1990)).

[32] *Id.* at 362.

[33] *Id.* at 362, 363.

or so trivial as to be virtually nonexistent."[34] By contrast, it stated, "the vast majority of compilations will pass" the originality test.[35]

Although the holding of *Feist* relates to copyrightability, the Court acknowledged the impact that its reasoning would have on the *scope* of copyright protection for compilations. "[C]opyright in a factual compilation is thin. Notwithstanding a valid copyright, a subsequent compiler remains free to use the facts contained in another's publication to aid in preparing a competing work, so long as the competing work does not feature the same selection and arrangement."[36] This represented a complete reversal of the earlier judicial approach in several circuits that held any substantial taking from a copyrightable compilation to be an infringement, and required second-comers independently to collect material for a competing compilation.

C. Subsequent Judicial Interpretation of *Feist*

Feist's teachings have proved important for lower courts both in determining copyrightability and in assessing scope of protection.

1. Copyrightability

Subsequent cases have confirmed that the category of works lacking the requisite level of creativity is small. A series of three Second Circuit decisions rendered shortly after *Feist* is illustrative.

In *Key Publications, Inc. v. Chinatown Today Publishing Enterprises Inc.*,[37] the Second Circuit sustained the copyrightability of the yellow pages of a telephone directory for New

---

[34] *Id.* at 359.

[35] *Id.*

[36] *Id.* at 349. This is consistent with the Court's statement that "[f]acts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted." *Id.* at 350.

[37] 945 F.2d 509 (2d Cir. 1991).

York's Chinese-American community. The court found that the selection of entries in Key's directory was original.[38] In addition, the arrangement of the directory into categories (e.g., Accountants, Bridal Shops, Shoe Stores, Bean Curd & Bean Sprout Shops) was, when "viewed in the aggregate," original, because it "entailed the de minimis thought needed to withstand the originality requirement."[39]

In *Kregos v. Associated Press*,[40] the court found the plaintiff's "pitching form" — a form comprised of nine statistics about a pitcher's performance — copyrightable. Kregos' selection of those nine statistics from the universe of statistics that can be used to describe a pitcher's performance could be original, according to the court. Reversing the district court's grant of summary judgment to the defendant, the Second Circuit held that "[i]t cannot be said [as a matter of law that] Kregos has failed to display enough selectivity to satisfy the requirements of originality."[41]

By contrast, in *Victor Lalli Enterprises, Inc. v. Big Red Apple, Inc.*,[42] the Second Circuit found insufficient creativity to support a copyright. The compilation at issue in *Lalli* was comprised of "lucky numbers" used in gambling, arranged in a grid with months along the vertical axis and days of the month along the horizontal axis. The numbers were computed according to a formula that was standard in that industry. The court found no originality in either

---

[38] *Id.* at 513.

[39] *Id.* at 514.

[40] 937 F.2d 700 (2d Cir. 1991).

[41] *Id.* at 704.

[42] 936 F.2d 671 (2d Cir. 1991).

the selection or arrangement of the data: "Lalli exercises neither selectivity in what he reports nor creativity in how he reports it."[43] The compilation was therefore held uncopyrightable.[44]

Among works that are particularly vulnerable to a finding of uncopyrightability are comprehensive factual databases covering an entire universe of information, where the element of "selection" is lacking and the "arrangement" is obvious.[45] The very comprehensiveness and ease of use of such a database may account both for its commercial value and its lack of protection under copyright.

---

[43] *Id.* at 673.

[44] The Sixth Circuit relied on *Victor Lalli* and other cases in concluding that a catalogue of replacement belts "organized in a manner unknown to the industry prior to its publication" was insufficiently creative to qualify for copyright protection. J. Thomas Distribs., Inc. v. Greenline Distribs., Inc., 41 U.S.P.Q.2d 1382 (6th Cir. 1986). There have been a number of recent district court cases addressing the issue of copyrightability as well. *See, e.g.*, Matthew Bender & Co. v. West Pub. Co., 1997 U.S. Dist. LEXIS 6915 (S.D.N.Y. May 19, 1997) (ruling without written opinion that West's pagination of reported cases was not copyrightable, and holding that West's editorial revision of cases themselves entails no copyrightable authorship); Oasis Pub. Co. v. West Pub. Co., 924 F. Supp. 918 (D. Minn. 1996) (upholding copyrightability of arrangement of cases in West's Southern Reporter (relying on West Pub. Co. v. Mead Data Central, Inc., 799 F.2d 1219 (8th Cir. 1986), *cert. denied*, 479 U.S. 1070 (1987)) and finding that defendant's use of star pagination to West page numbers was infringement); National Council on Compensation Ins., Inc. v. Insurance Data Resources, Inc., 40 U.S.P.Q.2d 1362 (S.D. Fla. 1996) (rejecting copyrightability of manual comprised of job codes and formulas used by insurance ratings organization to gather workers' compensation experience data).

[45] *Cf.* Warren Pub., Inc. v. Microdos Data Corp., 115 F.3d 1509 (11th Cir. 1997) (holding plaintiff "did not exercise any creativity or judgment in 'selecting' cable systems to include in its Factbook, but rather included the entire relevant universe known to it"). In spite of the fact that the copyrightability of the plaintiff's compilation was conceded by the defendant (and therefore not an issue on appeal), the court did not find any element of the plaintiff's work that it examined to be protectible. From a plaintiff's standpoint, this has much the same effect as a finding of uncopyrightability, since the only conduct that arguably can be said to infringe is verbatim duplication of the entire work. *See also* American Dental Assoc. v. Delta Dental Plans Assoc., 39 U.S.P.Q.2d 1714 (N.D. Ill. 1996) (selecting dental procedures in "Code on Dental Procedures and Nomenclature" was intended to be comprehensive, and therefore did not exhibit minimal originality to be copyrightable; arrangement of procedures under various headings and subheadings was likewise unoriginal and unprotectible).

2. *Scope of Protection*

The *Feist* statement that "the copyright in a factual compilation is thin" has been borne out in case law subsequent to the *Feist* decision. In both *Key Publications* and *Kregos*, the Second Circuit's holding that the work was sufficiently original to be copyrightable was followed by a finding of noninfringement.[46] Although the court had stated in *Key Publications* that, while compilation copyright is thin, "we do not believe it is anorexic,"[47] the scope of protection adopted in *Kregos* was quite narrow. There, the Second Circuit held that the defendant's compilation would not infringe if it "differs in more than a trivial degree" from the plaintiff's work, essentially creating a "virtual identity" standard for infringement.[48] The Ninth Circuit had also applied a virtual identity standard in compilation cases predating the *Feist* decision.[49] Without necessarily articulating a virtual identity standard, a number of district courts have adopted a similarly narrow scope of protection.[50]

---

[46] The Second Circuit found that the defendant's compilation did not infringe in Key Publications, Inc. v. Chinatown Today Pub. Enters. Inc., 945 F.2d 509, 515-16 (2d Cir. 1991). In Kregos v. Associated Press, the district court reached that conclusion on remand. 795 F. Supp. 1325 (S.D.N.Y. 1992), *aff'd*, 3 F.3d 656 (2d Cir. 1993).

[47] *Key Publications*, 945 F.2d at 514.

[48] *Kregos*, 937 F.2d 700, 710; *see also* Harbor Software, Inc. v. Applied Sys., Inc., 936 F. Supp. 167, 170-71 (S.D.N.Y. 1996) (applying "trivial difference test" to screen displays and reports generated by computer program, which court had previously determined to be protectible as compilations).

[49] Harper House, Inc. v. Thomas Nelson, Inc., 889 F.2d 197, 205 (9th Cir. 1989) (treating printed organizer as compilation of uncopyrightable elements and employing virtual identity standard for infringement).

[50] *See, e.g.*, Alexandria Drafting Co. v. Amsterdam, 1997 U.S. Dist. LEXIS 8197 (E.D. Pa. June 4, 1997) (treating plaintiff's maps as compilations of "pictorial facts representing an objective reality," and holding that copying of features such as positions of symbols and street alignments did not constitute infringement); Martindale-Hubbell, Inc. v. Dunhill Int'l List Co., No. 88-6767-CIV-ROETTGER (S.D. Fla. Dec. 30, 1994) (unpublished) (holding that wholesale copying of names, addresses, and other items of information from plaintiff's directory was not infringement). *Cf.* Nester's Map & Guide Corp. v. Hagstrom Map Co., 796 F. Supp. 729, 734 (E.D.N.Y. 1992) (stating that "Key Publications does not stand for the proposition that copying copyrighted materials is proper so long as the copying, though significant, is done in moderation," and finding infringement of plaintiff's compilation of New York City

Other courts have accorded even thinner protection to compilations in which copyright was conceded, failing to discern originality in any particular acts of selection or arrangement. In a pair of post-*Feist* cases, the Eleventh Circuit found that copying of significant portions of copyrightable compilations was not infringing because the material copied did not rise to the level of creative authorship.

In *Bellsouth Advertising & Publishing Corp. v. Donnelley Information Publishing, Inc.* ("*BAPCO*"),[51] the Eleventh Circuit held that the defendant's entry into a computer of all of the names, addresses and telephone numbers of advertisers in the plaintiff's yellow pages telephone directory, together with business type and type of advertisement, did not infringe.

Since the parties had stipulated to the copyrightability of the plaintiff's directory, and agreed that "the only elements of a work entitled to compilation copyright protection are the selection, arrangement or coordination as they appear in the work as a whole,"[52] the court focused on the elements of selection, coordination and arrangement that the plaintiff claimed were infringed, and found each to be either unprotectible or not copied. For example, the plaintiff claimed (and the district court held) that it selected the listings by determining the geographic scope of the directory, establishing a closing date for changes, and limiting listings to subscribers to its business telephone service, as well as through a variety of marketing techniques. The court found that these elements did not meet the level of creativity required by *Feist*.[53] Moreover, the court did not consider these elements to be "acts of authorship, but techniques for the discovery

---

cross streets and building numbers).

[51] 999 F.2d 1436 (11th Cir. 1993) (en banc).

[52] *Id.* at 1438.

[53] *Id.* at 1441.

of facts . . . . The protection of copyright must inhere in a creatively original *selection* of facts to be reported and not in the creative means used to discover those facts."[54]

The court also found the arrangement of the directory "in an alphabetized list of business types, with individual businesses listed in alphabetical order under the applicable headings" to be unoriginal, and to have merged with the idea of a business directory.[55] As to the headings used in the plaintiff's directory, the court did not rule on protectibility, finding as a factual matter that there was insufficient evidence to establish that defendant had copied them.[56]

The Eleventh Circuit reached a similar result in *Warren Publishing, Inc. v. Microdos Data Corp.*[57] As in *BAPCO*, the copyrightability of Warren's compilation — a hard copy directory of cable television systems and their owners — was conceded and therefore not an issue before the court.[58] Microdos, the defendant, marketed an electronic database of information on the cable television industry. Warren claimed infringement as to the communities chosen and the designation of certain of them as "lead communities" in circumstances where a cable operator owns systems in multiple communities.[59] The district court had found that "'the selection

---

[54] *Id.* (emphasis in original).

[55] *Id.* at 1442.

[56] *Id.* at 1444. Relying on *BAPCO*, a Florida district court reached the same result in a case involving the Martindale-Hubbell Law Directory. Martindale-Hubbell, Inc. v. Dunhill Int'l List Co., No. 88-6767-DIV-ROETTGER (S.D. Fla. Dec. 30, 1994) (unpublished). The defendant's copying of all of the names and addresses of lawyers in the plaintiff's directory, together with certain "correlating data" (attorney specialization, title, firm composition and structure) was held not to be an infringement, since those elements were all unprotectible facts. *Id.* at 13-14. As in *BAPCO*, the parties did not dispute the copyrightability of plaintiff's work as a whole. *Id.* at 9.

[57] 115 F.3d 1509 (11th Cir. 1997) (en banc).

[58] *Id.* at 1513 n.4.

[59] *Id.* at 1512. Warren had also claimed infringement as to the data fields and the data field entries. *Id.* The district court found that Microdos had not infringed the data field format and that the data field entries were unprotectible facts. *Id.*

of . . . communities was creative and protectible because Warren uses a unique system in selecting the communities that will be represented in the Factbook.'"[60] The Eleventh Circuit held that, to the extent that the district court was correct in characterizing Warren's claim as relating to a *system* of selecting communities, section 102(b) of the Copyright Act would bar protection.[61] Even if that characterization were incorrect, the court held that Warren's selection was not original and thus unprotectible. According to the Eleventh Circuit, Warren "did not exercise any creativity or judgment in 'selecting' cable systems to include in its Factbook, but rather included the entire relevant universe known to it."[62] As to the selection of principal communities, the court held that since Warren made this determination by contacting cable operators and asking them, "the selection is not its own, but rather that of the cable operators."[63] Consequently, the court found no infringement and vacated the district court's injunction.

BAPCO and *Warren* appear to equate a compiler's criteria for selection and organization, respectively, with ideas—which are by definition unprotectible. Taken together, these two cases represent a different approach from the doctrine of "soft facts" or "soft ideas" articulated by the Second Circuit in *CCC Information Servs., Inc. v. Maclean Hunter Market Reports, Inc.*[64] In *CCC*, the Second Circuit posited that there are facts or ideas that are "infused with the author's taste or opinion," as opposed to explaining phenomena or furnishing solutions to problems.[65]

---

[60] *Id.* at 1516.

[61] *Id.* at 1517. Section 102(b), which is set out in full above, precludes protection for "any idea, procedure, process, system, method of operation, concept, principle, or discovery . . . ." 17 U.S.C. § 102(b).

[62] *Warren Pub.*, 115 F.3d at 1518.

[63] *Id.* at 1519.

[64] 44 F.3d 61 (2d Cir. 1994).

[65] *Id.* at 71 (relying on *Kregos*, 37 F.2d at 707).

The court recognized that using the merger doctrine[66] to rule out protection for the compilation itself by characterizing as "ideas" the criteria used to select or arrange its contents would render copyright for compilations "illusory."[67] This is because "virtually any independent creation of the compiler as to selection, coordination, or arrangement will be designed to add to the usefulness or desirability of his compendium for targeted groups of potential customers, and will represent an idea."[68] The approach taken by the court was, "[i]n cases of wholesale takings of compilations, a selective application of the merger doctrine, withholding its application as to soft ideas infused with taste and opinion . . . "[69]

In summary, very few of the post-*Feist* compilation cases have held entire works to be uncopyrightable. In fact, copyrightability of the entire work is seldom even contested. Disputes tend to focus instead on the scope of protection. Consistent with *Feist's* pronouncement that copyright affords compilations only "thin" protection, most of the post-*Feist* appellate cases have

---

[66] Under the merger doctrine, where an idea can be expressed in only one or a small number of ways, the expression is said to have "merged" with the idea and become unprotectible. *See Kregos*, 937 F.2d at 705; Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738, 742 (9th Cir. 1971).

[67] *CCC Info. Servs.*, 44 F.3d at 70-71. The court also held that the selection and arrangement of data in a compilation of used car valuations (the "Red Book") "displayed amply sufficient originality" to satisfy *Feist*. *Id.* at 67.

[68] *Id.* at 70.

[69] *Id.* at 72. *See also* Compaq Computer Corp. v. Procom Tech., Inc., 908 F. Supp. 1409, 1418 (S.D. Tex. 1995) (stating Compaq's compilation of five "threshold values" used to predict imminent failure of disk drive meets *Feist* standard since Compaq made numerous subjective choices requiring creativity and judgment in determining which values to monitor; moreover, "the underlying elements of the compilation are not facts" because they were determined by Compaq based on its estimate of when drive would fail and its business judgment as to when it would be willing to replace it under product warranty); Jane C. Ginsburg, *Copyright, Common Law and Sui Generis Protection of Databases in the U.S. and Abroad*, U. CIN. L. REV. (forthcoming 1997). *But see* Alexandria Drafting Co. v. Amsterdam, 43 U.S.P.Q.2d 1247 (E.D. Pa. 1997) (copying of "false facts" invented by plaintiff and inserted in its work to detect copying is not infringement); *Nester's Map & Guide Corp.*, 796 F. Supp. at 733.

found wholesale takings from copyrightable compilations to be non-infringing. This trend is carrying through to district courts as well.[70]

[70] *See supra* note 51.

II. DATABASE INDUSTRY PRACTICES

Many of the issues discussed in this report relate in some way to the manner in which the database industry operates today: how databases are protected against unauthorized use, and how they are licensed. A basic overview of industry practices is useful in examining the adequacy of existing protection and the impact of any changes in the law.

The information in this section is derived from a number of sources, including comments made at the Copyright Office meetings, public documents and submissions prepared by industry members, including a 1995 position paper of the Information Industry Association,[71] informal queries by Copyright Office staff, and third party publications. While details can be difficult to obtain, since database producers are hesitant to make public their proprietary information and business strategies, it is possible to identify certain common or standard practices as well as general trends.

The limitations in the coverage of copyright, described above, have motivated database producers to be creative in protecting their products. They have developed a variety of legal and business strategies, which are typically implemented in combination. In recent years, three main strategies have emerged. Producers have (1) sought to enhance their copyright protection by altering the structure or content of their databases to incorporate greater creativity; (2) increased their reliance on contracts to restrict the use of databases; and (3) employed technological safeguards to prevent unauthorized access and use.[72]

---

[71] INFORMATION INDUSTRY ASS'N, DATABASE PROTECTION: AN INDUSTRY PERSPECTIVE ON THE ISSUES (1995).

[72] In appropriate circumstances, producers also take steps to secure trade secrecy and trademark protection. As discussed in section VII.B.2-3 *infra*, however, such protection is limited in its applicability.

A. Enhancing Copyright Protection

Some producers have altered the content or structure of their databases, with the goal of obtaining or increasing meaningful copyright protection. One technique is to enhance the contents of the database by adding copyrightable material. Another is to make the database more creative through subjective selection and unusual arrangement of its content. Databases that incorporate one or more of these techniques are often referred to as "value-added databases." While some companies first began enhancing their factual content in response to *Feist*, other companies have built their businesses on this practice for market reasons.

It is difficult to obtain specific examples of "enhanced" databases, since producers do not wish to identify databases that are vulnerable to copying, or point to which aspects of their databases they believe to be copyrightable.

1. Adding Copyrightable Text

Some database producers have purposely added copyrightable text to their databases in response to the *Feist* decision. Databases that feature copyrightable text have a stronger likelihood of copyright protection than ones that are purely factual. Such text may take the form of descriptive bibliographies, abstracts, profiles or annotations connected to database entries. A competitor interested in copying only the noncopyrightable portions would face two obstacles: (1) the process of separating facts from text may be labor intensive (though possibly less so as technology improves); and (2) the copyrightable material may be integral enough to give the first producer a competitive edge in the marketplace.

Apart from the copyright implications, a market clearly exists for databases combining text with facts or other public domain materials. EMBASE, for example, is an on-line database from Elsevier Science; its index of titles from international biomedicine, pharmaceutical research and related disciplines includes bibliographic information. American Statistical Index, from Congressional Information Inc., provides abstracts as well as indexing of all federal statistical

publications. The reports of judicial opinions published by West Publishing Company include synopses of the cases.

There is a simpler, although less effective, alternative to incorporating copyrightable text throughout the database. Some producers insert text only in designated places, such as the foreword or afterword to a directory, or a section describing community services. As a business matter, such additions may provide consumers with a useful component that other compilations lack. From a legal standpoint, this strategy has limitations. It will make the work as a whole protectible, but will not extend protection to otherwise unprotectible material it contains. It therefore could prevent unsophisticated, verbatim copying, but would not serve as a meaningful barrier to copying of the factual component. The producer will, however, be able to obtain a registration for the database with the Copyright Office. Although the copyright still covers only the copyrightable components of the work, the existence of the registration may deter a would-be copier.

As a variant of this strategy, database producers might insert quasi-factual material such as approximations or "soft facts" into the database. In addition to its utility to consumers, material of this sort may have a greater claim to copyright protection, and may therefore help to ensure copyright protection for the database as a whole.[73] The scope of the protection, however, will remain thin.

2. Making the Database More Creative

In the wake of *Feist*, practitioners advised database producers to increase the likelihood of copyright protection by incorporating a more subjective selection of facts or a more creative arrangement.[74] The utility of this strategy depends on the nature of the database. For some

---

[73] *See* discussion of "soft facts" doctrine, *supra*, section I.B.2.

[74] *See, e.g.*, Baila H. Celedonia, *From Copyright to Copycat: Open Season on Data?*, PUB. WKLY., Aug. 16, 1991, at 34 (recommending that compilers "consider enriching their publications in terms of subjective analysis of the[] facts," and attempt to incorporate "value-added subjective selection and

databases, such added value may enhance the desirability of the product. Lawyers have long found the West Publishing Company's indexing system of cases by key number to be a valuable research tool. Consumers may prefer a listing of restaurants that weeds out those not worth visiting.

This is not the case, however, for the many databases whose market appeal lies in the availability of comprehensive and easily accessible, unadorned facts. From the point of view of an individual user, added textual information may be superfluous or irrelevant, and may make the database too large or unwieldy. Subjective selection may destroy the database's value as a resource when the user's goal is to examine all the relevant facts. And creative arrangement, to the extent that it is possible,[75] will almost by definition make the facts more difficult to locate. Moreover, adding these elements entails time and money. This may make the database more expensive to create, which in turn may make it more expensive for consumers.

B. Contractual Protection

For many database producers, contracts provide a major source of protection, either complementing copyright law or picking up the thread where it falls short. Although contracts in the database industry were common prior to *Feist*, in both the digital and the print worlds, companies report that they have reviewed and strengthened them in recent years. These include form contracts as well as negotiated agreements tailored for individuals or institutions. They may appear in traditional print, in shrink-wrap form, on a computer screen as part of software or on-line, or in a combination of these formats. For example, a user may first encounter license

---

arrangement" to make their products more protectible).

[75] The contents of a database in electronic form will primarily be arranged by the particular search used to retrieve them, rather than according to an overall, predetermined design of the producer.

terms through shrink-wrap packaging, and then receive the same or additional terms on his computer screen.

1. Terms of Use

Though terms vary from company to company and from product to product, the core coverage of database contracts tends to be similar: contracts restrict access, specify permissible conditions of use, and set terms for enforcement and remedies. They may also contain language designed to educate the consumer about legal rights and limitations.

For databases other than those made freely available to the public (such as telephone directories), contracts are generally the condition of access for a user. Even for a noncopyrightable database, they can also offer users the benefit of timely, updated information.[76]

One common use of contracts is to restrict or limit the manner of use of a database. An on-line license typically dictates the parameters of acceptable downloading and redissemination, as in the following excerpts from the agreements of two major database producers, Dun & Bradstreet and Lexis-Nexis:

> You are granted a nonexclusive, nontransferable limited license to access and use for research purposes the Online Services and Materials from time to time made available to you . . . you are prohibited from downloading, storing, reproducing, transmitting, displaying, copying, distributing, or using Materials retrieved from the Online Services. You may not print or download Materials without using the printing or downloading commands of the Online Services.[77]
>
> Customer shall not . . . use Information in connection with providing advice or recommendations to others, publish Information in the news media, incorporate or use Information in

---

[76] *See* Ginsburg, *supra* note 70, at 16 ("Copyright is not synonymous with commercial value, and not everything that might be the subject of a license is a subject of copyright. Here, the value is not so much in the content, as in the timing of its delivery. The same stock quote information one hour later is worthless").

[77] Lexis-Nexis Master Agreement, ¶¶ 1.1, 1.3.

> any kind of database or marketing list to be provided to a third party, or produce Information in judicial or administrative proceedings, including discovery proceedings, without D & B's prior written consent, unless required by law. [78]
>
> Customer shall not copy, download, upload or in any other way reproduce Information or Software except . . . Customer may create for internal use online and offline printouts of materials received in electronic form.[79]

These agreements limit users' ability to use the contents of databases in ways that the law would otherwise allow.

Other agreements used in connection with databases in CD-ROM format make explicit reference to fair use. For example, a Lexis-Nexis contract for CD-ROMs allows users to "create a printout of an insubstantial portion of material retrieved from the Licensed Databases," and reproduce them "to the extent permitted under the fair use provisions of the Copyright Act."

Contracts may also establish enforcement procedures and remedies. Such terms can include the ability to terminate a subscriber's access, suspend or discontinue services, or pursue any other legal remedy.[80]

Terms may be more restrictive for particularly valuable or sensitive information. Dun & Bradstreet, for example, has strict practices for its sensitive information, such as information relating to bankruptcy filings. For these products, it restricts third party distribution and exercises extreme caution in its licensing practices. By keeping direct control over distribution, the company is always in a position to recall or expand earlier data. It also conducts thorough

---

[78] Dun & Bradstreet Master Agreement, ¶ 3.3.

[79] *Id.* at ¶¶ 4.1, 4.2.

[80] *See generally* contracts collected in INFORMATION INDUSTRY ASS'N, CONTRACTS IN THE INFORMATION INDUSTRY III (Peter Marx, ed. 1995).

background checks on potential patrons and extends licenses only to those who are creditworthy and risk-free.

Despite their usefulness, database producers report practical limitations on the effectiveness of contract restrictions, primarily as a result of the privity requirement of contract law.[81] A CD-ROM product, for instance, is physically out of a company's control once delivered to the client. The contract accompanying the product binds only the initial parties; it would not bind third parties who come into possession downstream. As a safeguard, companies may limit CD-ROM licenses to institutions that are not seen as grave risks for piracy.

2. Pricing

As might be expected, different companies provide different types of price structures. Some charge users a flat fee; some charge by byte or by minute for databases made available on-line. Others provide free unlimited access as part of a subscription.

Whatever the system used, it is fairly standard to differentiate prices among users. Companies may offer two-, three-, or even four-tier pricing, contingent on the nature of the use that will be made of the database.[82] Some do not charge at all for non-profit or academic uses, and then have graduated rates for different commercial uses. In general, commercial producers report that they make their databases available to educational institutions at greatly reduced fees—often a small fraction of the fees to commercial users. Many will charge at least some fee, in order to cover costs, and to make clear that there is value to their product and that it should be treated accordingly.

---

[81] *See infra* section VII.B.4.

[82] *See, e.g.*, ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996), discussed below in section VII.B.4. ProCD sold its product at one price for consumers and at another, higher price for commercial users. The court noted that this strategy benefited consumers, by providing them a product at an attractive price, as well as commercial users, by allowing ProCD to offer the product to them at a price lower than would be possible in the absence of consumer sales. *Id.*

Recently, educational institutions have tended to seek "buffet-style" terms, allowing unlimited use by as many users as desired for a flat fee. Various mechanisms are utilized, with the fees to such institutions sometimes priced according to the number of users at that institution. A choice of features may also be available, with higher fees charged for better services or software, such as more sophisticated search engines.

In contrast to commercial producers, some science agencies have found price differentiation impractical, since it can be more expensive for them to keep track of who is entitled to which price than to make the information available for free.

C. Technological Safeguards

Technological safeguards, while offering great promise to producers in supplementing legal protection, are still in the early stages of development. Despite the frequent mention of cryptographic software as a technological solution to the protection of intellectual property, such sophisticated protections are not yet in common use. Few if any database producers today rely upon technology as a sole means of protection, utilizing such safeguards only in combination with licensing and enforcement of legal rights.

The technological safeguards in use today are in large part simple, or low-end, measures. Standard measures in the on-line world include the requirement of user-passwords for dial-up services and the ability to disconnect a user whose behavior appears suspect. Lexis-Nexis, for example, will automatically cut off users if contractual limits for downloading are exceeded. In these circumstances, a user's password can be temporarily disabled until further information about his or her actions can be obtained.

Nevertheless, some companies believe that encryption is an option whose time is just around the corner. At present, many users of large databases are institutional clients who obtain access through closed system networks. As more database providers consider making their

products available for open exploitation over the Internet by individual consumers, encryption needs will expand. For these providers, the goal is to provide a commercial channel secure enough to allow database content and user payments to be exchanged electronically. They believe the growth of commercial products on the World Wide Web will lead to greater use of access keys and other forms of decryption software. Such options are, in the prediction of one company, a year or so away. For now, the combination of relatively high costs and still undeveloped on-line markets make them impractical. It is likely that any on-line dissemination of databases will involve a combination of encryption, secure electronic transfer of funds, and "click-wrap" licenses requiring users to agree to terms before accessing the database.

Meanwhile, however, a few companies have begun to experiment with encryption for their off-line products. For example, one Dun & Bradstreet product, *Business Solutions in a Box*, is a CD-ROM package of information for small business entrepreneurs. Although the entire database is included on the disk, it appears in encrypted form with restrictions that prevent users from accessing and downloading more than 300 of a possible ten million records unless they pay an additional fee. In keeping with industry trends, however, the encryption is not Dun & Bradstreet's sole protection. Users must assent to these terms in a "click-wrap" license before accessing any of the records.

Database producers consider technological safeguards, like contracts, to be a useful but imperfect solution. Such safeguards cannot protect databases in print form, which still represent a large proportion of the market. Moreover, high-end measures like encryption are, in their current form, expensive to maintain and inconvenient for users. As technology develops, their cost may decrease and their ease of use may increase. Nevertheless, producers report that they will never rely solely on technological measures to protect their products. First, there are security problems. Such measures, like physical locks, can be broken into; encryption keys, for

example, can be shared by users in some circumstances.[83] Second, once a database has been lawfully decrypted, the producer cannot control subsequent access to and use of the decrypted version.

[83] Security concerns could be ameliorated by legal provisions making it unlawful to circumvent technological safeguards. Such proposals, in the context of safeguards for copyrighted works, are under consideration in Congress as part of implementing legislation for the two World Intellectual Property Organization treaties concluded in Geneva in December 1996 (described *infra* in nn. 175-76). H.R. 2281, 105th Cong., 1st Sess. § 3 (1997); S. 1121, 105th Cong., 1st Sess. § 3 (1997) (adding a new section 1201 to Title 17 that would prohibit "circumvent[ion of] a technological protection measure that effectively controls access to" a copyrighted work).

III. COPYRIGHT OFFICE REGISTRATION PRACTICES

The question of whether and to what extent databases are copyrightable is basic to the discussion of database protection generally and is an underlying theme throughout this report. The Copyright Office, as the agency of the U.S. government responsible for registering copyright claims in works of authorship, makes determinations of copyrightability on a daily basis. Its work includes the task of assessing the copyrightability of databases, which are often dynamic works of authorship and can be fixed in many forms, from print to electronic media. These assessments have important consequences. A registration certificate issued within five years of publication is *prima facie* evidence of copyrightability and of the facts stated in the certificate.[84] Moreover, courts generally give deference to the Register of Copyrights with respect to copyrightability and her decision to allow or deny registration.[85]

Over the years, the Office has developed practices and procedures to assist in determining the copyrightability of the works it examines, including databases. This section discusses registration generally and outlines the practices governing the registration of databases both before and after *Feist*.

---

[84] 17 U.S.C. § 410(c).

[85] *See* Esquire v. Ringer, 591 F.2d 796, 805-06 (D.C. Cir. 1978), *cert. denied*, 440 U.S. 908 (1979) (quoting Bouvé v. Twentieth Century-Fox Film Corp., 122 F.2d 51, 53 (D.C. Cir. 1941)). *Accord*, Custom Chrome, Inc. v. Ringer, 35 U.S.P.Q.2d 1714 (D.D.C. 1995); Jon Woods Fashions, Inc. v. Curran, 8 U.S.P.Q.2d 1870 (S.D.N.Y. 1988); John Muller & Co., Inc. v. New York Arrows Soccer Team, Inc., 802 F.2d 989 (8th Cir. 1986); 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.08[B][1] (1997) [hereinafter *Nimmer*].

A. Registration Generally

One of the primary roles of the Copyright Office is to register copyright claims in works of authorship.[86] Although registration is not a condition of copyright protection, it provides many benefits,[87] and is therefore routine practice for many commercial copyright owners, including database producers.

In order to be registered, a work must comprise original authorship. When there is a genuine question about the copyrightability of a work, the Office notes its uncertainty by registering under its "rule of doubt."[88] This means that although the work will be registered, "there is a reasonable doubt about the ultimate action which might be taken under the same circumstances by an appropriate court with respect to whether (1) the material deposited for registration constitutes copyrightable subject matter or (2) the other legal and formal requirements of the statute have been met."[89]

---

[86] 17 U.S.C. §§ 410 and 701(a).

[87] As a practical matter, registration serves as notice to the public that the registrant claims a copyright in the work. The Copyright Act also establishes several incentives for registration. In addition to the evidentiary benefits noted above, better remedies are available for infringement if a work has previously been registered. 17 U.S.C. § 412. *See also* 19 C.F.R. § 133.31(a) (1997) (defining works eligible for recordation with Customs in order to block unauthorized imports as those works which have been registered). Registration is required for a U.S. work in order to sue for infringement, 17 U.S.C. § 411(a), and allows priority in the event of conflicting transfers. 17 U.S.C. § 205.

[88] The "rule of doubt" has never been codified in any version of the Copyright Act, and no court has ruled on its application. It was created by the Copyright Office, which has historically interpreted its responsibilities as permitting discretionary registration in cases of doubt. Herbert A. Howell, former Assistant Register of Copyrights, describing the "rule of doubt," wrote in 1942 that notwithstanding a probable loss of copyright due to failure to satisfy certain complex technical requirements then in effect, "the Copyright Office has always been inclined to give the author the benefit of the doubt, if there be any, and make registration for whatever it may be worth." HERBERT A. HOWELL, THE COPYRIGHT LAW 92 (1942). The Compendium of Copyright Office Practices II directs examiners to register claims in certain factual and legal situations under the rule of doubt, or with a "cautionary" or "warning" letter. *See, e.g.*, Chapter 4 (Notice), § 4.2.4.IV., at 4-29; Chapter 4 (Notice), § 4.3.3.II, at 4-38; Chapter 7 (Works by Foreign Authors), § 7.2.1.II.b, at 7-7; Chapter 8 (Copyright in Works First Published Abroad), § 8.2.1.III.a, at 8-9 [hereinafter *Compendium*].

[89] Compendium § 108.07.

Databases may be collections of works (for example, journal articles) or of data (facts). In examining a database for registrability, the Copyright Office must determine whether it is a protectible "compilation" as defined in the Copyright Act.[90] The Office has prepared guidelines to assist its examiners in determining the copyrightability of databases. General guidelines are set out in the Compendium of Copyright Office Practices.[91] More specific guidelines for databases, including those fixed in automated form, are set out in a series of memoranda issued to the examining staff before and after *Feist* (discussed below).

Where the contents of the database represent new copyrightable subject matter, there is no question that a claim in the database may be registered. Therefore, the Office focuses on whether the claim has been appropriately stated so as to identify that new subject matter. Often, however, the claim is limited to compilation authorship because the contents of the database consist of preexisting materials, whether facts, public domain materials or works that have been previously published. In such cases, the Office must determine whether the selection, coordination or arrangement is copyrightable, making the database registrable.

---

[90] A compilation is defined in the Copyright Act as "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated or arranged in such a way that the resulting work as a whole constitutes an original work of authorship." 17 U.S.C. § 101. *See* discussion of this definition and its meaning *supra* section I.A.

The legislative history of the 1976 Act indicates that compilations can fall within the category of "literary works." H.R. Rep. No. 1476, 94th Cong., 2d Sess. 54 (1976). Most database registration claims are submitted on the form for nondramatic literary works (Form TX). To the extent a database has copyrightable content included in the claim, the nature of the content will usually determine the category of the registration. For example, databases comprised mostly of static graphic images are submitted on the form for "works of the visual arts" (Form VA). Where the authorship in a work falls into more than one category, the appropriate application form is determined by the predominant authorship. 37 C.F.R. § 202.3(b)(2) (1996).

[91] Compendium §§ 307.01, 307.02, 307.03.

Where a compilation lacks a certain minimum amount of original authorship, registration will be refused.[92] In general, the greater the amount of material from which to select, coordinate, or order, the more likely it is that the compilation will be found registrable.[93] There is also a basic *de minimis* quantity test: "Any compilation consisting of less than four selections is considered to lack the requisite original authorship."[94]

B. Pre-*Feist* Practices

As a general matter, the Copyright Office has always applied an originality standard in examining works for registration. Until the late 1980's, however, it also registered compilations based on "sweat of the brow."[95] Such compilations included but not were not limited to white pages telephone directories and other factual databases. Beginning in 1987, the Office began to question the copyrightability of works where sweat of the brow was the only basis for registration. By 1989, it had abandoned this standard for most compilations, continuing to apply it only to works like telephone directories in which some courts were still upholding copyrightability based on sweat of brow.

1. Databases and the Rule of Doubt

Prior to *Feist*, the Office registered a number of compilations under the rule of doubt. The "doubt" was primarily based on the co-existence in case law of the sweat of the brow standard with the 1976 Act's explicit originality standard. One such registration involved the bibliographic database of the On-line Computer Library Center ("OCLC"), which consisted of a collection of numerous member libraries' catalogue entries, where the order was determined by

---

[92] *Id.* § 307.01.

[93] *Id.*

[94] *Id.*

[95] *See supra* section I.A.

the contributing libraries and the arrangement was chronological. Another case involved an application from the National Republican Congressional Committee for registration of its donor lists, arranged by zip code and alphabetically within each code. The Office registered the list as a compilation, but in correspondence with the applicant noted its uncertainty and the need for judicial guidance on the copyrightability of compilations of data.[96]

2. 1988 and 1989 Interim Guidelines for Database Registration

In 1987, the Office reviewed its database practices and considered abandoning its practice of registering sweat of the brow claims. "Interim Guidelines" were issued in 1988 with a memorandum to the staff stating that the courts had concluded that sweat of the brow might still apply to telephone directories but should not be extended to other factual compilations. Examiners were directed to register telephone directories as "a separate category of copyrightable works," and to reject registration for certain other compilations.[97] The Guidelines specified that criteria used to consider the copyrightability of telephone directories should not be applied to other compilations, with the exception of street directories.[98]

Among the types of claims recommended for refusal were 1) in-house directories that contain an entire universe based on a single source arranged mechanically or alphabetically; 2) "parts" catalogues and price lists where the catalogue or update represents an exhaustive list of

---

[96] In subsequent litigation, the National Republican Congressional Committee filed suit against a private corporation engaged in the commercial sale of various types of data, alleging unauthorized use of its lists. The district court dismissed, finding the copyrightability of the compilation of donor facts incompatible with the public interest goals of the Federal Election Campaign Act; the D.C. Circuit postponed consideration pending a separate, administrative interpretation by the Federal Election Commission. National Republican Congressional Comm. v. Legi-Tech Corp., 795 F.2d 190, 192 (D.C. Cir. 1986). In doing so, the circuit court observed that "the copyrightability of compilations of data is a highly uncertain area of the law which has divided courts and commentators alike." *Id.* at 194.

[97] Memorandum on Copyrightability of Compilations (May 9, 1988).

[98] *Id.* In recognition of the fact that the copyrightability of many compilations would be difficult to judge, the Office made all such rejections subject to supervisory review. *Id.*

inventory and the arrangement is numerical; and 3) membership lists containing the entire universe of members arranged alphabetically, by state or zip code.[99] Because these guidelines rejected sweat of the brow as a basis for protection for most categories of work at a time when some jurisdictions still accepted it, there was dissatisfaction with them both in the Copyright Office and within the private sector, and they were never fully implemented.

In 1989, the Office issued "Guidelines for Registration of Fact-Based Compilations." The guidelines advised examiners to register commercial telephone, street and business directories, and parts catalogues and inventory lists that were not "clearly *de minimis*." [100] Examiners were advised to reject standard organization charts and any compilations containing fewer than four items.[101] More difficult claims, such as mailing lists and subscriber lists, were to be rejected unless "the compilation represents a modicum of selection and/or arrangement authorship and the quantity of material compiled is not *de minimis*."[102] The Guidelines stated that telephone directories continued to be treated differently by all federal courts (i.e., even those that otherwise rejected sweat of the brow), and therefore should not be examined under "the usual Copyright Office criteria."[103] Thus, in 1989 the Copyright Office moved almost entirely to an originality standard, rejecting sweat of the brow for all compilations except telephone books and similar directories.

3. Registration of Automated Databases

During the period from 1985 to 1989, the Office considered some special issues posed by automated databases. The Compendium of Copyright Office Practices defines "automated

---

[99] *Id.*

[100] *See* Guidelines for Registration of Fact-Based Compilations at 5-7 (Oct. 10, 1989).

[101] *Id.* at 6.

[102] *Id.* at 7.

[103] *Id.* at 1.

database" as a "body of facts, data, or other information assembled into an organized format, suitable for use in a computer and comprising one or more files."[104]

One of the major issues posed by automated databases is the status of ongoing updates or other changes.[105] The Copyright Office has been faced with the need to determine when a modified database qualifies as a new work of authorship subject to a separate registration. To the extent that each update of a database contains copyrightable subject matter, it may be registered.[106] Each registration for a published, updated database covers only the additions that were published on the date specified in the application as the date of publication.[107]

Automated databases may be updated frequently; it is not unusual for a database to be updated several times a day. Database producers on many occasions informed the Office that it was impossible as a practical matter to register and deposit the "new" work each time revisions were made available to the public. Those who did register updated versions adopted certain practices designed to ensure that the bulk of their databases was covered by a registration, generally making regular, but periodic, registrations. OCLC, for example, chose to register its updated database once a month, on a day when many additions and revisions were made. However, because such a registration covered only the new material added on the given date of publication, many published updates and additions were not registered.

---

[104] Compendium § 328.

[105] In testimony before the Senate Committee on the Judiciary and House Subcommittee on Courts and Intellectual Property in November 1995, the Office took the position that a work is published if copies of the work are electronically transmitted to the public. *See NII Copyright Protection Act of 1995: Joint Hearing on H.R. 2441 and S. 1284 Before the Subcomm. on Courts and Intellectual Property of the House Comm. on the Judiciary and the Senate Comm. on the Judiciary,* 104th Cong., 1st Sess. 42 (1995) (statement of Marybeth Peters, Register of Copyrights). Today, many on-line databases are registered as published; others are registered as unpublished.

[106] *See* 37 C.F.R. § 202.3(b)(4).

[107] U.S. Copyright Office, Circular 65, Copyright Registration for Automated Databases (attached as Appendix A).

To address this problem, in 1989 the Copyright Office adopted a regulation allowing group registration for both published and unpublished automated databases.[108] The regulation allows three months worth of updates to be registered at one time, with a deposit consisting of identifying material from one representative day.

C. Post-*Feist* Practices

The *Feist* decision did not have a major impact on the Copyright Office's registration practices for compilations. It did, however, give the Office the clear authority to reject works for which protection was claimed solely on the basis of "industrious collection" or "sweat of the brow."

Immediately following *Feist*, the Copyright Office revisited its examining practices for compilations, and issued new guidelines in 1991.[109] In general, the Office concluded that most compilations would continue to meet the standard of originality required by *Feist*.[110] Nevertheless, examiners were instructed to give extra scrutiny to five types of works: (1) telephone directories; (2) street directories, cross-directories and other directories; (3) periodically updated directories; (4) annual cumulations; and (5) parts catalogues and inventory lists. Specifically, the guidelines advised examiners to reject registration applications where the claim was limited to "white pages," "listings," or "revised listings" in phone books, and to continue to question claims where the nature of the contribution was not clear. More specialized

---

[108] *See* 37 C.F.R § 202.3(b)(4) and U.S. Copyright Office Circular 65.

[109] Memorandum from Nancy H. Lawrence, Head, Literary 1 to staff, Literary 1 and 2, Guidelines for Examining Fact-Based Compilations: post-*Feist* (July 8, 1991) [hereinafter *Guidelines*].

[110] *See* Marybeth Peters, *The Copyright Office and Formal Requirements of Registration of Claims to Copyright*, 17 U. DAYTON L. REV. 744 (1992).

or feature-heavy directories, such as business profiles or annotated membership periodicals, were contrasted as compilations that clearly involve sufficient selectivity to be copyrightable.[111]

In practice, the Office continued to exercise considerable judgment in applying the guidelines. It did not categorically refuse all business directories, for example, registering those it believed to contain copyrightable authorship. The Office sent letters to remitters of compilations, citing the *Feist* holding and the corresponding change in Office practices. In the cases where applicants continued to submit telephone directories, examiners suggested statements of the claim in terms of copyrightable authorship, such as "new text in foreword, " or "revisions and additions to yellow pages."[112] Such correspondence over claim specifications and disclaimers prompted some concern in the private sector that the Office's new practices were akin to a "patentization" of the copyright system.[113]

The Copyright Office's heavy post-*Feist* correspondence lasted for a few months. Within two years of *Feist*, the Office was corresponding with applicants only on occasion. Many applicants sent letters with their submissions, specifying what they believed constituted the originality in their selection, coordination and arrangement.

Despite industry concerns that the Office would interpret *Feist* too broadly, establishing strict bright line rules, the Office continued, and continues today, to accept most compilations submitted for registration. It is impossible to know, however, how many compilation claims are not submitted because their owners are concerned that the Office will question copyrightability or refuse registration.

Occasionally, the Office still receives an application to register white pages telephone directories. In 1991, Southwestern Bell submitted a claim for copyright registration in certain

---

[111] Guidelines at 1, 3.

[112] *Id.* at 1.

[113] *See, e.g.*, Steven J. Metalitz, *Copyright Registration After Feist: New Rules and New Roles?*, 17 U. DAYTON L. REV. 766 (1992).

features of the St. Louis White Pages. The company claimed that the work was copyrightable either as a compilation or as a graphic work. The latter claim was based on the typeface and layout of the page, which included various "user-friendly" features. When the Copyright Office denied registration, Southwestern sued under the Administrative Procedures Act.[114] The court affirmed the Copyright Office's denial of registration, finding no abuse of discretion.[115]

---

[114] *See* 17 U.S.C. § 701(d); 5 U.S.C. §§ 702, 704.

[115] Southwestern Bell Tel. v. Peters, No. 4 Civ. 95CV00886 GFG, at 14, 16 (E.D. Mo. July 31, 1996).

IV. THE INTERNATIONAL CONTEXT

A. International Treaties

Databases have also been the subject of attention in the international arena. Their status as copyrightable subject matter is guaranteed by the two major multilateral treaties relating to copyright. The Berne Convention for the Protection of Literary and Artistic Works since 1948 has required member countries to protect "[c]ollections of literary or artistic works such as encyclopaedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations."[116] The coverage of databases of fact was confirmed in 1995 by the TRIPs Agreement,[117] which states: "Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such."[118]

Since January 1996, developed country members of the World Trade Organization have been bound by this obligation; the obligation takes effect for all other members over the next few years.[119] The TRIPs Agreement also specifies that the copyright protection for compilations

---

[116] Berne Convention for the Protection of Literary and Artistic Works, as revised at Paris, art. 2(5) Mar. 1, 1989 [hereinafter *Berne Convention*]. The 1908 revision of the Berne Convention required protection for "collections of different works." Berlin Act, art. 2(2).

[117] Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994, art. 10(2) [hereinafter *TRIPs*]. The TRIPs Agreement constitutes Annex 1C of the Marrakesh Agreement establishing the World Trade Organization (WTO), which was concluded on April 15, 1994, and entered into force on January 1, 1995. TRIPs binds all members of the WTO (*see* art. II.2 of the WTO Agreement).

[118] *Id.* Similar language is contained in the World Intellectual Property Organization (WIPO) Copyright Treaty, Dec. 1996, art. 5 [hereinafter *WIPO Copyright Treaty*] which has not yet become effective. As early as 1982, a meeting of government experts convened by WIPO and UNESCO recognized that "collections and compilations of information" could qualify for copyright protection. *Second Committee of Governmental Experts on Copyright Problems Arising from the Use of Computers for Access to or the Creation of Works* (June 7-11, 1982), *reprinted in* 18 COPYRIGHT 239, 245 (1982).

[119] TRIPs, arts. 65, 66.

"shall not extend to the data or material itself,"[120] and contains another provision stating that "[c]opyright protection shall extend to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such."[121]

B. European Database Directive

1. Background

Pursuant to the action plan set out in its 1991 "Follow-up to the Green Paper,"[122] the European Commission proposed in 1992 to harmonize the national laws within the European Union regarding the protection of databases. The Commission proposal was adopted in a modified form as a directive to the member states on March 11, 1996 (attached to this report as Appendix B).[123] The directive is required to be implemented by the member states by January 1, 1998.

A number of factors appear to have led the European Union (EU)[124] to harmonize the law regarding database protection. The rapid expansion of the Internet raised the EU's awareness of "the exponential growth, in the Community and worldwide, in the amount of information generated and processed annually in all sectors of commerce and industry," and the important role of databases "in the development of an information market within the community."[125] The

---

[120] TRIPs, art. 10(2). *See also* WIPO Copyright Treaty, art. 5.

[121] TRIPs, art. 9(2). *See also* WIPO Copyright Treaty, art. 2.

[122] Doc. COM (90) 584 final, 17 Jan. 1991. The "Green Paper" referred to is the 1988 "Green Paper on Copyright and the Challenge of Technology," Doc. COM (88) 172 final, 7 June 1988.

[123] Directive 96/9/EC of the European Parliament and of the Council of the European Union of 11 March 1996 on the legal protection of databases, 1996 O.J. (L 77/20) [hereinafter *Database Directive*].

[124] In this report, for the purpose of simplicity, the European Community and its Member States and the European Union generally are referred to as the "European Union" or "EU."

[125] Database Directive, recitals (10), (9).

EU also expressed concern about the "very great imbalance in the level of investment in the database sector both as between the Member States and between the Community and the world's largest database-producing third countries."[126] In addition, the *Feist* decision in the U.S. Supreme Court galvanized concern regarding the adequacy of copyright protection for databases within the EU.[127]

The directive covers compilations of data in any form, and thus includes hard copy compilations as well as electronic databases.[128] The Commission's original proposal was limited to electronic databases, but in the course of deliberations this approach was found unworkable, because it would subject the identical material to differing legal standards based solely on the medium employed. As one of the participants is reported to have stated, "making use of a scanner should not be decisive in granting legal protection."[129] In addition, technologies such as

---

[126] *Id.* recital (11).

[127] Jens-L. Gaster, The New EU Directive Concerning the Legal Protection of Data Bases, *in* FOURTH ANNUAL CONFERENCE ON INTERNATIONAL INTELLECTUAL PROPERTY LAW & POLICY 35, 42 (Fordham Univ. School of Law, Apr. 11, 1996); Mark Powell, The European Database Directive: An International Antidote to the Side-Effects of Feist?, *in* FOURTH ANNUAL CONFERENCE ON INTERNATIONAL INTELLECTUAL PROPERTY LAW & POLICY 49, 57-58 (Fordham Univ. School of Law, Apr. 11, 1996).

[128] Database Directive, art. 1(1), recital (14). The term "database" is defined in the directive as "a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means." Art. 1(2). Explicitly excluded from protection under the directive are "computer programs used in the making or operation of databases accessible by electronic means." Art. 1(3). Recital (17) expands on the definition:

> [T]he term "database" should be understood to include literary, artistic, musical or other collections of works or collections of other material such as texts, sound, images, numbers, facts, and data; . . . it should cover collections of independent works, data or other materials which are systematically or methodically arranged and can be individually accessed; . . . this means that a recording or an audiovisual, cinematographic, literary or musical work as such does not fall within the scope of this Directive.

[129] Gaster, *supra* note 128, at 35, 37. The author, who was the principal administrator within the Commission's copyright unit responsible for the legal protection of databases while the directive was under debate, appears to be quoting or paraphrasing another participant in the discussions.

scanning and optical character recognition render even hard-copy databases vulnerable to unauthorized copying and commercial reuse in both hard-copy and electronic form.[130] Moreover, the TRIPs Agreement makes no such distinction.[131]

As adopted, the directive establishes a dual system for protection of databases. One component is copyright protection for the "structure" of the database.[132] The other is a *sui generis* ("of its own kind" — i.e., not falling within existing categories of legal protection) intellectual property right in the contents of the database.

2. Copyright Protection

The copyright portion of the directive, Chapter II, applies only to the structure or schema of a database, without prejudice to any existing protection under copyright for the database contents.[133] It seeks to harmonize the scope of copyright protection for databases throughout the European Union. It does so in two major respects: First, it sets a uniform standard of originality. Second, it establishes a uniform list of "restricted acts" (i.e., exclusive rights) and exceptions to restricted acts.

Prior to the directive, copyright protection for databases in the member states could be divided into two general groups. In the U.K., Ireland and the Netherlands, the threshold for protection was quite low. In particular, Anglo-Irish common law incorporated a "sweat of the brow" doctrine that developed from the same line of eighteenth and nineteenth century English cases that were cited in early U.S. compilation cases.[134] In the remaining European countries,

---

[130] Powell, *supra* note 128, at 70.

[131] *Id.*

[132] Database Directive, recital 15.

[133] *Id.* art. 3(2).

[134] See discussion, *supra* section I.A.

however, copyright imposed a fairly high threshold of originality to qualify for protection.[135] This is in keeping with the "author's right" approach that prevails throughout most of Continental Europe, which defines originality as an expression of the author's individual personality.[136]

The standard established by the directive requires the database to, "by reason of the selection or arrangement of [its] contents, constitute the author's own intellectual creation."[137] This language was incorporated verbatim from the EU's 1991 directive on the protection of computer programs.[138] It was originally adopted to override the very high standard of originality mandated by the German Supreme Court in the "Inkasso Programm" case and other decisions.[139] At the same time, by requiring an "intellectual creation," the database directive imposes a higher standard of originality than that required under current law in the U.K., Ireland and the Netherlands. The directive thus charts a middle course on the level of originality required. Although the directive's standard of originality has not been tested in practice, the formulation appears to be quite similar to the criteria for protection under U.S. law, as set out in the definition of "compilation" in the Copyright Act and interpreted by the Supreme Court in *Feist*.[140]

The "restricted acts" (exclusive rights of the copyright owner) under the directive are reproduction (temporary or permanent), adaptation, distribution, and communication, display or

---

[135] Gaster, *supra* note 128, at 41-42.

[136] Stephen M. Stewart, International Copyright and Neighboring Rights, § 1.13, at 6 (2d ed. 1989). Within this second group of European countries, however, the four Nordic countries (Norway, Sweden, Finland and Denmark) have an additional "related" right for factual compilations, such as catalogues and directories. This "catalogue rule" is discussed *infra* in section IV.B.3.

[137] Database Directive, art. 3(1).

[138] Council Directive 91/250/EEC of 14 May 1991 on the Legal Protection of Computer Programs, 1991 O.J. (L 122/42) [hereinafter *Software Directive*].

[139] Gaster, *supra* note 128, at 39.

[140] *See* discussion *supra* section I.B.

performance to the public.[141] Authorization is not required for a lawful user to engage in any restricted act "which is necessary for the purposes of access to the contents of the database and normal use of the contents."[142] Any contractual provision to the contrary is "null and void."[143]

In addition to this mandatory exemption, the directive permits member states to provide for limitations on the restricted acts in the following cases:

> (a) in the case of reproduction for private purposes of a non-electronic database;
>
> (b) where there is use for the sole purpose of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved;
>
> (c) where there is use for the purposes of public security o[r] for the purposes of an administrative or judicial procedure;
>
> (d) where other exceptions to copyright which are traditionally authorized under national law are involved, without prejudice to points (a), (b) and (c).[144]

---

[141] Database Directive, art. 5. The directive only covers economic rights under copyright; moral rights are beyond the scope of the directive. *Id.* recital (28).

[142] Database Directive, art. 6(1). *Cf.* Software Directive, art. 5(1).

[143] Database Directive, art. 15.

[144] *Id.* art. 6(2). It has been suggested that article 6(2) "narrow[s] the educational and scientific communities' ability to invoke 'fair use' with respect to copyrightable databases under prior law." Jerome H. Reichman & Pamela Samuelson, *Intellectual Property Rights in Data?*, 50 VAND. L. REV. 51, 79 (1997). This view is based on an interpretation of points (a) through (c) as limitations on the scope of any exception permitted under point (d). *Id.* at 77, n.113. Others view point (d) as allowing "other exceptions to copyright which are traditionally permitted by the Member State concerned to continue." Gaster, *supra* note 128, at 40.

Such exceptions are subject to an overall economic harm limitation, ensuring that they cannot "unreasonably prejudice[ ] the rightholder's legitimate interests or conflict[ ] with normal exploitation of the database."[145]

3. Sui Generis Protection

As a supplement to copyright, Chapter III of the directive establishes a *sui generis* form of protection for the contents of databases. The stated justification for this protection is that "in the absence of a harmonized system of unfair-competition legislation or of case-law, other measures are required in addition [to copyright] to prevent the unauthorized extraction and/or re-utilization of the contents of a database," the making of which "requires the investment of considerable human, technical and financial resources while such databases can be copied or accessed at a fraction of the cost needed to design them independently."[146]

Some of the EU member states originally advocated leaving the protection of the contents of databases to unfair competition law, and the initial Commission proposal described the *sui generis* right as a "right to prevent unfair extraction from a database" for commercial purposes.[147] By mid-1993, however, "an increasing majority of interested parties" were reportedly favoring the creation of a property right along the lines ultimately adopted.[148] The rationale, at least in part, was the perceived difficulty in harmonizing unfair competition law throughout the

---

[145] Database Directive, art. 6(3). This language is patterned after virtually identical language in the Berne Convention, art. 9(2) and TRIPs, art. 13 (which has been relied on by the United States to permit the doctrine of fair use under copyright law). *See also* WIPO Copyright Treaty, art. 10, and accompanying Agreed Statement (noting the understanding that similar treaty language would "permit Contracting Parties to carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws which have been considered acceptable under the Berne Convention.")

[146] Database Directive, recitals (6) and (7).

[147] Proposal for a Council Directive on the Legal Protection of Databases, COM(92)24 final, art. 2 [hereinafter *1992 Proposal*]; *see also* Powell, *supra* note 128, at 68.

[148] Gaster, *supra* note 128, at 42-43.

European Union. In addition, the Commission has noted that "unfair competition rules only come into play once an act has taken place. They do not provide an economic right with clear scope which can be freely transferred."[149]

In some respects the *sui generis* right is similar to the "catalogue rule" existing in the Nordic countries, which provided a model for the Commission. That rule establishes a "related right" for factual compilations, in addition to copyright protection. The catalogue rule provides to the producer of a catalogue, table, or similar matter "in which a large number of information items have been compiled" a right against unauthorized reproduction.[150] Originality is not a requirement for protection, and the term of protection for such "catalogues" is fairly short: 10 years from publication or 15 years from creation, whichever expires sooner.

The essential features of the database directive's *sui generis* right are:

a. Protection for "substantial investment." The *sui generis* right is available for "the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents . . ."[151] "Substantial investment" is not defined in the directive. However, the recitals leading up to its provisions indicate that "such investment may consist in the deployment of financial resources and/or the expending of time, effort and energy."[152]

---

[149] Submission from the European Community and its Member States to the World Intellectual Property Organization on "An International Treaty on the Protection of Databases," p. 2 (July 1997). For a more complete discussion of the Commission's motivations for abandoning the unfair competition approach, *see* Powell, *supra* note 128, at 62-64 (quoting the Commission's Explanatory Memorandum to the Member States); Gaster, *supra* note 128, at 43 (noting that unfair competition laws apply only to competitive situations).

[150] Swedish Copyright Act, art. 49. *See also* Norwegian Copyright Act, art. 43; Danish Copyright Act, art. 71; Finnish Copyright Act, art. 49.

[151] Database Directive, art. 7(1).

[152] *Id.* recital (40).

b. Protects against acts of extraction and re-utilization. The rights accorded under the directive are the rights to "prevent extraction and/or re-utilization of the whole or of a substantial part . . . of the contents of that database."[153] "Extraction" is defined as "the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form."[154] "Re-utilization" is defined as "any form of making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by on-line or other forms of transmission."[155]

c. "Insubstantial parts" excluded from protection. The maker of a database "may not prevent a lawful user of the database from extracting and/or re-utilizing insubstantial parts of its contents . . . for any purposes whatsoever."[156] Any contractual provision to the contrary is "null and void."[157] The directive does not attempt to define "insubstantial parts," but does state that substantiality is to be "evaluated qualitatively and/or quantitatively."[158]

d. Exceptions for certain uses. The directive permits member states to adopt exceptions from the *sui generis* right for lawful users in three specific categories: (a) extraction for private purposes of the contents of a non-electronic database; (b) "extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved"; and (c) "extraction and/or re-

---

[153] *Id.* art. 7(1).

[154] *Id.* art. 7(2)(a).

[155] *Id.* art 7(2)(b).

[156] *Id.* art. 8(1).

[157] *Id.* art. 15.

[158] *Id.* art. 8(1).

utilization for the purposes of public security or an administrative or judicial procedure."[159] These exceptions are similar to those permitted under copyright, but without the additional reference to "other exceptions to copyright which are traditionally authorized under national laws." Nevertheless, the recitals indicate that existing exemptions to any existing similar *sui generis* rights are grandfathered under the directive.[160]

The exceptions must be read in conjunction with provisions in the directive on "obligations of lawful users," prohibiting lawful users of databases that have been made available to the public from "performing acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database," or "caus[ing] prejudice to the holder of a copyright or related right in respect of the works or subject matter contained in the database."[161]

e. **Fifteen year term of protection.** The term of protection for the *sui generis* right is fifteen years.[162] This was an increase from the ten-year term that was originally proposed in 1992.[163] Any qualitatively or quantitatively "substantial change," including one resulting from an accumulation of small changes, "which would result in the database being considered to be a substantial new investment," qualifies the resulting database for its own fifteen-year term of protection.[164]

---

[159] *Id.* art. 9. While not stated explicitly in the text of the provision on exceptions, Recital (50) adds the gloss that the purpose of "such operations . . . must not be commercial."

[160] *Id.* recital 52.

[161] *Id.* arts. 8(2), 8(3) (again patterned after Berne Convention, art. 9(2) and TRIPs, art. 13). Recital (50) indicates that articles 8(2) and 8(3) function as a limitation on the exceptions in article 9.

[162] *Id.* art. 10(1).

[163] 1992 Proposal, art. 9(3).

[164] Database Directive, art. 10(3). It is unclear whether the new term of protection would apply to the entire database or only the "substantial new investment." Powell, *supra* note 128, at 96.

f. Available to non-EU nationals only on the basis of reciprocity. The *sui generis* right is available only to database makers who are EU nationals or habitual residents.[165] For purposes of the directive, this would include business entities that have a business presence in the EU (defined as a central administration or principal place of business in the EU, or a registered office in the EU plus a genuine, ongoing operational link with the economy of a member state).[166] The EU can conclude agreements to extend the right to databases made in third countries.[167] Although the provisions of the directive themselves are silent as to the basis for such agreements, the recitals make clear that protection will be offered only on the basis of reciprocity— i.e., where the third country offers "comparable protection" to EU databases.[168]

The original proposal for the directive also included a compulsory license, requiring database vendors who are the sole source of any given information to license that information to competitors on "fair and non-discriminatory terms."[169] This provision proved controversial. It was dropped after the European Court of Justice imposed a similar licensing requirement under existing principles of EU competition law in the "Magill case."[170] At the same time, apparently as part of an overall compromise, changes were made in the scope of the right and the exceptions, as well as the provision on rights of lawful users.[171]

---

[165] Database Directive, art. 11(1).

[166] *Id.* art. 11(2).

[167] *Id.* art. 11(3).

[168] *Id.* recital (56); Gaster, *supra* note 128, at 46.

[169] 1992 Proposal, art 8(1).

[170] Cases C-241/91 P and C-242/91 P, Radio Telefis Eireann v. Commission of the European Communities, E.C.J. (Apr. 6, 1995) (upholding an order by the Commission requiring television broadcasters to license self-generated programming information to competing publishers of program guides on a non-discriminatory basis).

[171] *See* Gaster, *supra* note 128, at 45.

The recitals acknowledge the important role of competition policy in the database area.[172] In addition, the directive establishes a procedure for review every three years to determine, among other things, "whether the application of [the *sui generis*] right has led to abuse of a dominant position or other interference with free competition which would justify appropriate measures being taken, including the establishment of non-voluntary licensing arrangements."[173]

4. Current Status of Implementation

Member states are obligated to implement the directive by January 1, 1998. Germany has already enacted implementing legislation, and we understand that most of the other member states expect to meet the deadline. All are actively preparing implementing legislation, and several are at an advanced stage in their internal processes of adoption.

C. Proposed WIPO Treaty

In February 1996, the European Union submitted a proposal to the World Intellectual Property Organization (WIPO) in Geneva for a treaty on the subject of legal protection for databases, for consideration by the WIPO Committees of Experts that had been meeting on a regular basis to discuss two other proposed treaties in the field of copyright and neighboring rights.[174] The European treaty proposal would have required countries adhering to the treaty to

---

[172] Database Directive, recital (47) ("Whereas, in the interests of competition between suppliers of information products and services, protection by the *sui generis* right must not be afforded in such a way as to facilitate abuses of a dominant position, in particular as regards the creation and distribution of new products and services which have an intellectual, documentary, technical, economic or commercial added value; whereas, therefore, the provisions of this Directive are without prejudice to the application of Community or national competition rules").

[173] *Id.*, art. 16 (3).

[174] These two treaties, which had been under discussion for several years, were intended to update and improve on existing international standards of protection in the area of copyright and neighboring rights. The current forms of the major WIPO treaties in this area, the Berne Convention for the Protection of Literary and Artistic Works, and the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (the "Rome Convention"), date back to 1971

establish a new, non-copyright form of protection for databases, referred to as *sui generis* protection. It was based on essentially the same concept contained in the directive, but framed in the simpler, more bare-bones style of international treaty language. The European proposal was distributed and briefly discussed at the Committee of Experts meeting that took place the week of February 5-9.

The next Committee of Experts meeting took place in May 1996. For consideration at that meeting, the United States submitted its own treaty proposal on the subject of database protection. This proposal differed from that submitted by the EU in several respects, primarily relating to the protectibility of government databases (the U.S. proposed allowing countries to deny protection), the term of protection (the U.S. proposed 25 years), the requirements for protecting foreign databases (the U.S. proposed national, i.e. non-discriminatory, treatment), and the ability to vary rights by contract (the U.S. proposed complete freedom of contract). Again, there was a brief debate of the database issues, during the course of a week-long discussion including the two other proposed treaties. The meeting concluded with a decision by the Committees to recommend to the Governing Bodies of WIPO that a Diplomatic Conference be convened in December 1996 to consider the adoption of treaties in all three areas.

On August 30, 1996, WIPO distributed draft texts of three treaties prepared by the Chairman of the Committees of Experts, Jukka Liedes of Finland, based on the various treaty proposals made by governments and the Committees of Experts' discussions of those proposals. One of the three, entitled "Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect of Databases to be Considered by the Diplomatic Conference"

---

and 1961, respectively.

(the " Draft Database Treaty" or "draft treaty"), dealt with the proposed *sui generis* right in databases.[175] A copy is attached as Appendix C.

The draft treaty combined elements of both the European and the U.S. proposals. As is standard in WIPO treaties, it set out the basic concepts of the subject matter of protection and the nature and duration of the rights, but left to individual countries the freedom to flesh out the details through exceptions and limitations.

The draft was structured as follows: A preamble described the importance of databases in the global information infrastructure and the need to provide effective legal protection for them on an international basis. Article 1 set out the scope of protection, requiring contracting parties to protect databases in any form or medium, based on the criterion of "a substantial investment in the collection, assembly, verification, organization or presentation" of the contents, irrespective of any protection under copyright or other legal rights in the database under national law.

The rights to be granted were defined in Article 3 as "the right to authorize or prohibit the extraction or utilization" of the database's contents. They were to be granted to the maker of the database, and thereafter be freely transferable.[176] No formalities could be imposed on the enjoyment and exercise of the rights.[177]

---

[175] The other two drafts were the Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works to be Considered by the Diplomatic Conference, WIPO Doc. No. CRNR/DC/4 (Aug. 30, 1996), and the Basic Proposal for the Substantive Provisions of the Treaty for the Protection of the Rights of Performers and Producers of Phonograms to be Considered by the Diplomatic Conference, WIPO Doc. No. CRNR/DC/5 (Aug. 30, 1996). Both were negotiated and ultimately adopted, although in substantially different form, by the WIPO Diplomatic Conference in Geneva in December 1996. *See* WIPO Copyright Treaty and World Intellectual Property Organization Performances and Phonograms Treaty, Dec. 1996 [hereinafter *WIPO Performances and Phonograms Treaty*].

[176] Draft Database Treaty, art. 4.

[177] *Id.* art. 9.

Article 2 contained definitions of the critical concepts of "database," "maker of the database," and "substantial investment," as well as the acts of "extraction" and "utilization" that constituted the rights to be granted, and the term "substantial part" appearing in the definition of those acts. "Database" was defined as "a collection of independent works, data or other materials arranged in a systematic or methodical way and capable of being individually accessed by electronic or other means." The "maker of the database" was "the natural or legal person or persons with control and responsibility for the undertaking of a substantial investment in making a database." The requisite "substantial investment" was defined as "any qualitatively or quantitatively significant investment of human, financial, technical or other resources in the collection, assembly, verification, organization or presentation of the contents of the database."

An act of "extraction" was "the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form," while an act of "utilization" was

> the making available to the public of all or a substantial part of the contents of a database by any means, including by the distribution of copies, by renting, or by on-line or other forms of transmission, including making the same available to the public at a place and at a time individually chosen by each member of the public.

Finally, the "substantial part" referred to in both of these definitions was itself defined as "any portion of the database, including an accumulation of small portions, that is of qualitative or quantitative significance to [its] value."

Exceptions were dealt with in Article 5. Using the long-accepted language from the Berne Convention[178] and the TRIPs Agreement,[179] this article allowed individual countries to provide exceptions or limitations to rights "in certain special cases that do not conflict with the

---

[178] Berne Convention, art. 9(2).

[179] TRIPs, art. 13.

normal exploitation of the database and do not unreasonably prejudice the legitimate interests of the rightholder." It also left to national determination the treatment of databases made by governmental entities, agents or employees.

Two alternatives were given for the term of protection: either 15 or 25 years.[180] A separate paragraph required a new term of protection when a database is changed through a new investment sufficient to qualify for protection in itself:

> Any substantial change to the database, evaluated qualitatively or quantitatively, including any substantial change resulting from the accumulation of successive additions, deletions, verifications, modifications in organization or presentation, or other alterations, which constitute a new substantial investment, shall qualify the database resulting from such investment for its own term of protection.[181]

This term of protection would apply not only to databases produced after the entry into force of the treaty, but also those that were already in existence at that time.[182] The resulting new protection for existing databases would not affect, however, any "acts concluded or rights acquired" before the treaty's entry into force, and countries could allow continued distribution of previously lawfully made copies for a period of up to two years.

The draft treaty made clear that the new form of protection would not affect in any way other laws relating to databases or their contents, including copyright, antitrust law, data protection and privacy, access to public documents and the law of contract.[183]

Each country would be required to protect makers of databases who were nationals of other contracting parties, on a national treatment basis—i.e., providing the same rights in respect

---

[180] Draft Database Treaty, art. 8.

[181] *Id.* art. 8(3).

[182] *Id.* art. 11.

[183] *Id.* art. 12.

to *sui generis* protection that it provided to its own nationals.[184] Finally, the draft contained the same provisions on technological protection measures and enforcement of rights as were contained in the two other draft treaties.[185]

The treaty proposal proved controversial within the United States. Numerous comments were submitted to the Patent and Trademark Office, with the overwhelming majority opposing conclusion of a treaty at that time, expressing concerns about the impact of such protection and/or urging delay until there had been an opportunity for full domestic debate. This group of commentators included members of the scientific, library and educational communities, as well as individual members of the public and at least one major database producer. Those commenting in favor were companies and trade associations from the publishing and database industries.

The draft treaty on databases was never reached or discussed in substance at the December 1996 Diplomatic Conference. The negotiation of the other two treaties continued throughout the entire three weeks of the Conference, concluding only in its final hours on the last day. During the Conference, a number of delegations expressed the view that the database treaty was premature, and that they were not ready to negotiate its provisions. Ultimately, the Conference adopted a recommendation that the Governing Bodies of WIPO should convene in March of 1997 and decide on the course of future work on the issue.

On March 20-21, the Governing Bodies determined that the subject of legal protection for databases should be taken up again in a meeting in Geneva on September 17-19, 1997. This will be an informational meeting, where delegations will discuss the treatment of databases under the

---

[184] *Id.* arts. 6-7.

[185] *Id.* arts. 10 and 13. *See* Basic Proposal on a Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works, arts. 13 and 16; Basic Proposal on a Treaty for the Protection of the Rights of Performers and Producers of Phonograms, arts. 22 and 27. (In the final, adopted treaties, different versions of these provisions became articles 11and 14, and 18 and 23, respectively.)

laws of their respective countries, and their experiences in dealing with the subject. The draft treaty itself is not scheduled to be the topic of debate.

85

V. PRIOR CONGRESSIONAL CONSIDERATION

During 1996, the possibility of legislation providing a new form of protection for databases was raised in the respective Congressional committees dealing with intellectual property.

In February 1996, the chief intellectual property counsel for the Senate Committee on the Judiciary attended the meeting of the WIPO Committees of Experts in Geneva, and reported to the delegates that the Senate was examining the issue and considering the introduction of legislation.

On May 23, 1996, during the next WIPO Committees of Experts meeting, Congressman Carlos Moorhead, then Chairman of the House of Representatives Subcommittee on Courts and Intellectual Property, introduced H.R. 3531, entitled the "Database Investment and Intellectual Property Antipiracy Act of 1996" (attached as Appendix D).[186] Like the subsequently-prepared WIPO draft treaty, the bill would have protected databases that result from a substantial investment against various acts of unauthorized extraction or use. As is usual with national legislation, the bill differed from the treaty primarily in containing more detail, particularly about the scope of rights and exceptions, as well as in spelling out remedies.

Section 2 was the definitional section. It defined "database" as "a collection, assembly or compilation, in any form or medium now or later known or developed, of works, data or other materials, arranged in a systematic or methodical way." The terms later relied on to delineate the prohibited acts, "extraction" and "use and reuse," were defined as follows:

> "Extraction" means the permanent or temporary transfer of all or a substantial part of the contents of a database or of a copy or copies thereof. Such transfer may be to an identical or different medium,

---

[186] H.R. 3531, 104th Cong., 2d Sess. (1996) [hereinafter *H.R. 3531*].

> and by any means or in any form, now or later known or developed.
>
> "Use" and "reuse" means making available all or a substantial part, qualitatively or quantitatively, of the contents of a database, or access to all or such substantial part, whether or not for direct or indirect commercial advantage or financial gain, by any means now known or later developed, including any of the following: (i) marketing, selling, or renting; (ii) in the form of permanent or temporary copies; or (iii) by distribution, any online or other form of transmission.

The bill did not define "substantial part," but defined its opposite, "insubstantial part," as "any portion of the contents of a database whose extraction, use or reuse does not diminish the value of the database, conflict with a normal exploitation of the database or adversely affect the actual or potential market for the database."

Section 3 set out the standards a database would have to meet to qualify for protection. A database would qualify

> if it is the result of a qualitatively or quantitatively substantial investment of human, technical, financial or other resources in the collection, assembly, verification, organization or presentation of the database contents, and (i) the database is used or reused in commerce; or (ii) the database owner intends to use or reuse the database in commerce.[187]

Specifically excluded from protection were databases made by a governmental entity, whether state or federal, but not databases whose contents were obtained from such an entity.[188] Another subsection ruled out protection for computer programs.[189]

The prohibited acts were set out in Section 4. The bill would have made it unlawful to perform the following acts without authorization:

---

[187] *Id.* § 3(a).

[188] *Id.* § 3(c) and definition of "Governmental entity" in § 2.

[189] *Id.* § 3(d).

> (1) extract, use or reuse all or a substantial part, qualitatively or quantitatively, of the contents of a [protected] database . . . in a manner that conflicts with the database owner's normal exploitation of the database or adversely affects the actual or potential market for the database;
>
> (2) engage . . . in the repeated or systematic extraction, use or reuse of insubstantial parts, qualitatively or quantitatively, of the contents of a [protected] database . . . in a manner that cumulatively conflicts with the database owner's normal exploitation of the database or adversely affects the actual or potential market for the database; or
>
> (3) procure, direct or commission any [of the foregoing] act[s].[190]

The bill further provided examples of circumstances in which acts of extraction, use or reuse *would* be considered to conflict with a normal exploitation of the database or adversely affect its actual or potential market.[191]

Exceptions were dealt with in Section 5. One paragraph stated that a lawful user of a database could extract or use insubstantial parts of its contents for any purpose, subject to the "repeated or systematic" test of section 4(2), set out above.[192] The other made explicit that anyone was free independently to collect, assemble or compile from other sources any of the material contained in a database.[193]

---

[190] *Id.* § 4(a).

[191] *Id.* § 4(b) (these circumstances involved direct or indirect competition in the database's current market or one which its owner had a "demonstrable interest or expectation" in entering; uses aimed at reasonably likely customers for the database; or multiple users within an organization without a license covering them).

[192] *Id.* § 5(a).

[193] *Id.* § 5(b).

Section 6 established the duration of protection. It provided a basic term of protection of 25 years, but with the ability to obtain a new term upon "any change of commercial significance."

Sections 7 and 8 established remedies, both civil and criminal.

Section 9 explained the relationship of the proposed protection to other bodies of law. It stated that copyright protection would not be affected, and that parties would remain free to enter into contractual agreements with respect to databases or their contents.[194] It also made clear that

> [n]othing in th[e] Act shall prejudice provisions concerning copyright, rights related to copyright or any other rights or obligations in the database or its contents, including laws in respect of patent, trademark, design rights, antitrust or competition, trade secrets, data protection and privacy, access to public documents, and the law of contract.[195]

Sections 10-13 dealt with the circumvention of technology used to protect databases against unauthorized acts, and with the integrity of database management information. Their language paralleled similar prohibitions contained in the then-pending bills proposing a National Information Infrastructure Copyright Protection Act.[196]

Section 14 contained a three-year statute of limitations.

Section 15 made the date of enactment the effective date of the act, and barred liability for the use or reuse of database contents lawfully extracted from a database prior to that date.

The House bill was introduced as an indication to the international community that Congress was interested in pursuing the subject of database protection. No hearings were held, and no corresponding bill was introduced in the Senate.

---

[194] *Id.* §§ 9(a) and (b).

[195] *Id.* § 9(c).

[196] H.R. 2441, 104th Cong., 1st Sess. § 4 (1995); S. 1284, 104th Cong., 1st Sess. § 4 (1995).

In the months following introduction of H.R. 3531, many of the groups that had opposed conclusion of the draft WIPO treaty expressed similar concerns about the bill relating both to substance and to timing and process. They urged that all interested parties be given an opportunity to provide input and that a thorough analysis of the issues be undertaken. Their substantive concerns are reflected in the discussion of the issues in Section VII below.

VI. COPYRIGHT OFFICE MEETINGS

A. Procedure

In order to provide Congress with complete and balanced information, the Copyright Office sought to meet with as many interested parties as possible. The Office initiated the process by scheduling a series of five meetings with the major groups that had already been vocal in indicating their interest in the subject of database protection: (1) the library community; (2) science agencies and organizations; (3) educational groups; (4) database producers who favor legislation; and (5) database producers who oppose legislation or do not favor it at this time. The goal was to start by ascertaining the shared views and concerns of each of these identifiable groups.

These meetings took place in March, May and June of this year. The participants were selected as follows: the Office identified those entities and individuals whose interest we had learned of through prior contacts and discussions. We added the names of organizations and associations who had submitted comments to the Patent and Trademark Office on the WIPO draft database treaty, or who had contacted the staff of the Congressional committees to communicate their concerns. We then asked representatives from each group to suggest any additional parties who should be invited. Finally, some participants contacted us directly with requests to attend.

Subsequent meetings were scheduled with persons or entities whose interests were distinct from the larger groups, or who had scheduling problems making it difficult for them to attend the large meetings. The Office also met with several academics and lawyers with particular expertise on the subject, who shared their own analysis of the issues presented. Finally, we made ourselves available to meet with anyone else who wished to communicate

views or concerns. In total, the Office held sixteen meetings, as well as receiving a number of additional communications, including by mail or telephone.

The meetings were structured to provide an informal environment conducive to focused, productive and open discussion. All were led by Marybeth Peters, the Register of Copyrights, with the assistance of the staff of the Office of Policy and International Affairs. Each participant was given an opportunity to present its specific views, and then an unlimited time period was devoted to general discussion of the issues. While there were no formal presentations or questions, Copyright Office staff occasionally asked questions to clarify facts or positions. The discussions were not transcribed, and written statements were not required, although some participants chose to submit them during or after the meetings.

A list of those attending the meetings is attached to this report as Appendix E. We note that the number of participants on any side of an issue was purely the result of the selection process described above. The Office made no attempt to achieve a numerical balance or to evaluate the relative size or importance of any interest group or position.

B. Overview of Positions

This section gives a general overview of the views expressed in the Copyright Office meetings. Inevitably, it cannot constitute a complete or perfectly accurate description of any one party's or group's views, but represents our best effort at communicating the essence of each position. There will, of course, be numerous opportunities at later stages in the process of legislative consideration for additional presentations and submission of materials. We do not identify particular parties, except where necessary to describe a distinct point of view.

From the outset, the Copyright Office made clear that it was starting from first principles and working from a clean slate, rather than assuming that any of the proposals from last year would be the starting point for Congressional consideration. During the meetings, however,

elements of prior proposals were frequently discussed, and these discussions are reflected below where useful and relevant.

The meetings indicated that core elements of agreement exist as to certain principles, where the difficulty lies primarily in determining how to implement those principles (whether by legislation or the absence of legislation). Thus, participants generally agreed on the following points: (1) databases are vulnerable to copying, and adequate incentives are needed to ensure their continued creation; (2) individual facts should not be the subject of private ownership; (3) anyone should be free to obtain facts independently from original sources, even after they have been incorporated in a database; (4) government databases should not be protected; (5) it is important not to harm science, research, education and news reporting; and (6) "free riding" in the form of substantial copying for commercial, competitive purposes should not be permitted.

In other areas, there is intense disagreement as to fundamental principles. The participants sharply differed, for example, on the adequacy of existing means of protection for databases; whether additional statutory protection or its absence is more likely to diminish access to data or raise its cost; and whether non-competitive uses that may harm the market for a database should be permitted.

Some participants in the Copyright Office meetings held strong views either in favor of new legislation or in opposition. In general, many members of the library and scientific communities, as well as some educational groups, telephone companies and Internet-related businesses, expressed opposition, while a majority of database producers, including producers of a variety of scientific and scholarly databases, and the owner of a major on-line retrieval service advocated legislation. It must be stressed, however, that positions were not uniform within all of these communities. Some commercial database producers, including one of the largest in the global marketplace, oppose legislation at this time; many scientific researchers, particularly those working for industry, favor it. The reasons for the differences among those who appear to be

similarly situated were not always clear. In some cases, it may simply be that they hold differing perceptions of the law or the potential dangers posed.

A large number of the participants were undecided, or took neutral or intermediate positions. Many have interests on both sides of the issue, as they both produce databases and rely on information obtained from the databases of others. They generally expressed a desire to ensure adequate incentives, along with concerns about the possible negative impact of new protection. For some of these participants, their view of any legislation would turn on the form and scope of protection it provided. Others were still analyzing the issues, and had not yet formed an opinion.

The Office also met with several groups or entities with no position on the advisability of legislation generally, but with a specific concern about how some aspect of any such legislation might affect their activities. Most of these participants stated that if a need were established for new protection, and it was possible to provide adequate protection without harming legitimate user interests, they would either support or not oppose legislation.

This section briefly summarizes the positions of those with clear views either pro or con. More detail will be given in the discussion of the issues below.

Proponents

Proponents of new legislation make the following principal points:

(1) Databases are increasingly important to the U.S. economy and to science, and will be a key component of content on the Internet. They often provide information not otherwise available from a single source in a usable form, and ensure that the information is reliable and timely. Given the acceleration of developments in communications, storage and retrieval technologies over the past five to ten years, vast quantities of information are made available today much more quickly, and users have much greater capabilities to access and manipulate it.

In addition, markets and science have evolved to demand increasing levels of comprehensiveness, accuracy and timeliness.

(2) Large investments of time and money are necessary to produce and maintain many databases. Voluminous information must be collected, placed in a usable format, and kept accurate and up-to-date.

(3) While it is expensive to collect and verify large numbers of facts, it is increasingly cheap to copy and disseminate them. Databases are therefore vulnerable to acts of piracy that threaten to destroy or significantly reduce their markets. This threat has been growing with the evolution of technology. With today's digital and scanning capabilities, major investments in both online and hard copy databases can be hijacked with the stroke of a key.

(4) Existing law is insufficient to protect against this threat. Although various forms of protection are available today, both legal and technological, there has been a gap in the law since the Supreme Court's decision in *Feist Publications v. Rural Telephone Service Co.*, resulting in an inability to obtain satisfactory legal relief in many circumstances. Problems have already been experienced by a number of database producers. It is critical to restore the protection against piracy that existed under the "sweat of the brow" theory of copyright law.

(5) Unless adequate protection is available for databases that require substantial resources to produce and maintain, such investments will significantly diminish. The result will be a loss not only of commercial profits, but of the public benefits accruing from the creation of databases and access to the information they contain. On the international level, markets for databases have become global, and the United States must provide adequate protection if it is to avoid competitive disadvantage with other regions of the world such as the European Union.

(6) The needed protection can be provided through appropriately crafted new legislation without harming the legitimate interests of the science community and other user groups. Indeed, scientific research will benefit from such protection, since researchers rely heavily on the

private sector to make the high levels of investment necessary to produce and maintain reliable, up-to-date and comprehensive collections of scientific data.

Opponents

Generally, those that oppose new protection or are doubtful about its advisability do not contest the proponents' assertions as to the importance of databases, the changes brought about in their creation, dissemination and use by developments in technologies, and the need to provide adequate incentives. They disagree as to the conclusions to be drawn, however, and make the following points:

(1) Proponents have not produced sufficient evidence that a problem exists that requires a legislative solution. Their arguments about the need for additional protection are based on theory, isolated anecdotes, and speculation about possible future harm. International developments, particularly the outcome of the European directive, will not cause them serious detriment. It would be premature for Congress to legislate without more extensive factual evidence, or without expert economic analysis.

(2) The combination of means of protection that exist today appears to be adequate. Copyright law continues to protect databases even after *Feist*. The Supreme Court in *Feist* explicitly stated that most databases would still qualify for copyright protection, and subsequent cases have borne this out. Moreover, recent case law has made clear that meaningful protection is available outside of copyright through contract and the common law of misappropriation. Technological means of protection are also available and effective. Proponents can come to Congress if this situation changes, for example if the case law begins to develop in an unsatisfactory direction.

(3) The U.S. database industry today is an example of market success, not market failure. The industry is thriving under the current legal regime, and has become the leader in the global

marketplace. Databases continue to be created and marketed, and businesses are paying record sums of money to purchase database producers.

(4) In this area, it is critical to proceed with great caution, especially in a time of rapidly evolving technologies and uses of data, since it is hard to predict future implications. New protection could result in negative consequences, even if unintended. A perceived trend toward commercialization of data, particularly data produced by government funding, could be exacerbated. Information could as a practical matter become less accessible or more expensive; concern about potential liability could have a chilling effect on uses of information that are in the public interest, such as scientific research and education. New legal protection could raise a new barrier to market entry for second comers, decreasing rather than increasing already low levels of competition and driving up prices.

(5) Copyright law embodies an appropriate balance between incentives for creation and the free flow of information, by granting rights but leaving ideas and facts in the public domain and providing leeway for public interest activities through the doctrine of fair use and other exceptions. This balance furthers Constitutional policies and should not lightly be disturbed. New rights should not be provided, especially if they give equivalent or greater protection than copyright, without the justification of creativity; facts should be left free for all to use.

In addition to these general points, government science agencies have raised concerns about the impact of any new protection in this area on the policy of full and open access to data that the United States has strongly pursued in the international arena.[197]

---

[197] *See generally* COMMITTEE ON ISSUES IN THE TRANSBORDER FLOW OF SCIENTIFIC DATA, U.S. NATIONAL COMMITTEE FOR CODATA, AND NATIONAL RESEARCH COUNCIL, BITS OF POWER: ISSUES IN GLOBAL ACCESS TO SCIENTIFIC DATA (1997); discussion *infra*, section VII.B.7.

VII. ISSUES

A. General

During the course of the meetings, several key issues began to emerge. At each meeting, different ones were stressed, different concerns expressed, and different subsidiary issues identified. Overall, however, most of the substance of the discussions can helpfully be grouped under one of six topics. It should be noted that the issues are interrelated in many respects, so that they cannot each be resolved in a vacuum.

The first, and threshold question, is whether additional legal protection for databases is needed. Several participants made the point that even if a need were shown for additional protection, Congress should not enact legislation without performing a cost-benefit analysis to determine whether the need outweighed the harm that would be caused by any such legislation. Of course, the ultimate test of any proposed legislation is whether its benefits outweigh its costs, and this test would have to be met in order for any form of database protection to be enacted. We have not addressed it as a separate issue in the report, however, because the question of what harm might be caused is dependent on how all of the other issues are resolved. Accordingly, our discussions of potential harm occur in the context of specific issues. For example, certain types of harm might be avoided by adopting certain exceptions, or otherwise framing the scope of protection in a certain way.

If the threshold question of need is answered in the affirmative, the next question is what type of protection would be preferable—a new form of property right, or a tort concept closer to unfair competition. The remaining issues also would only need to be addressed if Congress decides that some form of legislation is desirable. These are: (1) definitional issues—how should the concept of "database" be defined, what should be the criteria for a database to qualify for protection, and what degree of taking should be actionable? (2) how can it be ensured that uses

of information in the public interest, such as for scientific, educational and news reporting purposes, are not harmed? (3) what should be the duration of any such new protection? and (4) how should "sole source" data be handled—i.e., situations where the data contained in a protected database is not available elsewhere? One additional issue was not discussed at any length in the meetings, but would need to be examined: what constitutional constraints may limit Congress's ability to legislate in this area. We discuss each of these issues in turn, describing the main points raised in the meetings.[198] In the process, we note those points where the issues are most obviously inter-related.

B. Is There a Need for Additional Protection?

All agree that the proponents of a new form of statutory protection have the burden of establishing the need for such protection. Some participants in the Copyright Office process chose to refrain from discussing any other issue pending the resolution of this first issue. They felt that they could not analyze what models of protection might be appropriate before identifying clearly the nature and scope of the problem.

Establishing such a need is the threshold question for any legislative initiative. Traditionally, the proponent of any change in the law, whether new rights or new limitations on rights, has borne the burden of convincing Congress of the need for the change.

Views diverge sharply, however, as to the type and degree of proof required to satisfy this burden. The options proposed ranged the gamut from a threat of future harm, to evidence of individual real-world problems, to empirical data generated through broad-scale studies. In the past, changes in intellectual property law have often been based on evidence of one of the first

---

[198] On any particular issue, the description of one side's views may be significantly longer than the description of another side's. This does not mean that the Copyright Office ascribes greater weight to those views or believes they are more persuasive, simply that one side raised more numerous or more complex points.

two types. Those arguing for economic studies believe that a higher standard is necessary here, either because it is preferable for the establishment of any new right, or because of the special nature of protection for collections of data in particular.

Various forms of protection against piracy do exist today for databases in the United States. Chief among these are copyright law, contracts, state misappropriation doctrine, trade secrecy, trademark law, and technological means of protection. The question is whether the combination of these existing sources of protection is sufficient to provide adequate incentives to produce a suitably wide variety of databases.

Much of the time at the meetings was devoted to debating this question. The remainder of this section summarizes the arguments on both sides.

1. General

Proponents argue that existing forms of protection are not sufficient. Some forms protect only certain limited aspects of databases, insufficient to reward the investment required to produce them; others are not well-defined and established, or uniform in geographic application. They perceive a gap in protection since the Supreme Court in *Feist* ruled out copyright for the "sweat of the brow" involved in producing a database, and believe that gap has had real-world negative consequences. They argue that Congress should stay ahead of the curve and prevent more serious harm from occurring.

In particular, proponents describe several cases where database producers have been unable to obtain relief from the courts against substantial, competitive copying.[199] The economic significance of such losses, they assert, has been evidenced by the effect on the producers' stock

---

[199] *See, e.g.*, Warren Pub., Inc. v. Microdos Data Corp., 43 U.S.P.Q.2d 1065 (11th Cir. 1997); Matthew Bender and Co., Inc. v. West Pub. Co., 42 U.S.P.Q.2d 1930 (S.D.N.Y. 1997); Skinder-Strauss Assoc. v. Mass. Continuing Legal Educ., Inc., 914 F. Supp. 665 (D. Mass. 1995); Martindale-Hubbell, Inc. v. Dunhill Int'l. List Co., No. 88-6767-CIV.- ROETTGER (S.D. Fla. Dec. 30, 1994).

prices.[200] They report that piracy has been a problem for others as well, but has not yet led to litigation. They express an understandable reluctance, however, to draw attention to particular databases as possibly uncopyrightable or subject to thin protection.

In addition, proponents assert that uncertainties in U.S. law have begun to affect investment decisions, with producers choosing not to create particularly vulnerable databases, or not to disseminate them broadly, because of a perception that the risks are too great. At least some large database producers in the United States and some European producers have reportedly been unwilling to make their databases available on-line in this country, despite the potential for substantial profit from that form of exploitation. One producer has even decided not to make its print database available to libraries because of a fear of piracy by library patrons.

Opponents, in contrast, view such evidence as insufficient, either because it is isolated, or because it is based on speculation as to future harm. They believe that existing law is adequate, and that the courts are generally drawing appropriate lines between protection and free use. Moreover, they point out that legal protection can be supplemented by technological protection, and argue that database producers should avail themselves fully of their existing options before seeking a legislative solution.

2. Copyright

As discussed in section I above, databases are copyrightable subject matter under U.S. law. Proponents value the benefits of copyright protection, and rely on it to the extent possible, but point out that copyright provides only limited protection for databases. While most databases remain copyrightable after *Feist* (and indeed the Court was careful to state that the white pages directory before it represented an extreme case),[201] it is precisely those databases that require the

---

[200] *See, e.g.*, Raymond Snoddy, *Reed Elsevier Shares Drop on U.S. Legal Ruling*, FIN. TIMES, May 23, 1997.

[201] *Feist*, 499 U.S. at 359.

greatest amount of investment and may be the most valuable to users whose copyright status is most doubtful: the massive, comprehensive database covering the entire universe of a given field, produced in electronic form with the arrangement of the data not fixed by the producer but chosen by each individual user. For such databases, it may be difficult for a court to discern any acts of selection or arrangement on the part of the compiler rising to the level of creative authorship.

One rational response of database producers to *Feist*'s analysis has been to add as many copyrightable elements as feasible to their databases (whether additional text or creative methods of selection or arrangement).[202] The result of such changes or additions may be to make the information in the databases less easily accessible to users, or less complete. As the capabilities of personal computers and mass marketed software such as search engines increase, consumers are more and more interested in products that offer comprehensive raw data in electronic form for their own selection and arrangement.

A database of meteorological, environmental or medical information, for example, must be comprehensive, accurate, and up-to-date, or the results could be injurious to health or safety. And it is most useful when organized in the most logical, obvious way possible. Subjective selection or a unique arrangement may impede the database's utility or ease of access. Even where this is not the result, resources are diverted from the task of collecting and disseminating information to the task of satisfying copyrightability thresholds—a diversion that may not be in the best interests of the public, as it is likely to lead to less production of content or higher prices.

At least of equal concern to proponents is the question of the scope of protection for copyrightable databases. In *Feist*, the Supreme Court made clear that the copyright in a compilation is "thin"—that it will not prevent the copying even of all the material contained in the compilation, if the copier does not take the creative elements of selection, coordination or

---

[202] *See* discussion *supra* section II.

arrangement that made the compilation copyrightable.[203] In other words, if the copyright in a database is based solely on its unusual arrangement of the data, a competitor may download and reuse all of the data that was collected at great expense, as long as the format is different.

Judicial developments since *Feist* have augmented rather than allayed these parties' concerns about the adequacy of copyright protection for databases. They read many of the subsequent cases as applying *Feist*'s teachings broadly, resulting in an extremely narrow and almost meaningless scope of protection. These cases, they say, hold that very little in any database is protectible, and that virtually everything of value is free for the taking. In particular, they point to the decisions in *BAPCO v. Donnelley* and *Warren Publishing*, discussed above in Section I.B., both of which allowed commercial competitors to extract substantial amounts of the contents of expensive-to-produce databases, finding that various acts of selection and arrangement did not meet *Feist*'s standard of minimal creativity.

Opponents believe that existing copyright law is adequate and appropriate, as supplemented by the other forms of protection described below. While they focused more on other issues during the meetings, some stressed the fact that very few databases have been held unprotectible, and viewed the thin scope of protection provided by the courts to be appropriate in light of the public interest in access to information.

3. Trade Secrets

While not discussed much at the meetings, trade secrecy law may also provide protection to certain databases. Compilations of data are one of the types of material that can be protected as trade secrets.[204] Several of the necessary elements of a trade secrecy claim, however, make such a claim unlikely for the typical database. First, the data must not be common knowledge,

---

[203] *Feist*, 499 U.S. at 349.

[204] Restatement of Torts § 757 comment b (1939); Restatement (Third) of Unfair Competition § 39 comment d (1993).

and must have been kept secret. Disclosure through sale, display, or circulation of goods embodying the compilation, for example, will forfeit trade secret status.[205] As a result, only those databases produced for internal use, and not made available to the public or exploited commercially, will be eligible for protection. Second, a claim for breach of trade secrecy requires a relationship between the owner of the secret and the defendant, involving either a contract or a confidential relationship,[206] or the use of improper means such as theft, fraud, or inducement of breach of confidence.[207] The ordinary act of use or exploitation of a database would otherwise not be covered.

4. Trademark

Some protection may also be available for databases under trademark law. For those databases that have come to be identified with a particular producer, the unauthorized use of material from the database in a manner that creates a likelihood of confusion as to source may be actionable under state or federal trademark law.[208] This can be important, especially for databases with users like scientists who rely on the names of reputable publishers in determining the reliability and timeliness of data.

Proponents point out, however, that such protection is limited; it will primarily be of assistance for famous "brand name" databases, such as Dun & Bradstreet's credit reports.

---

[205] 1 ROGER M. MILGRIM, MILGRIM ON TRADE SECRETS § 105[2] (1996) [hereinafter *Milgrim*].

[206] *Id.* at § 3.03.

[207] 2 Milgrim § 7.03; Restatement (Third) of Unfair Competition § 43 (1993).

[208] *See generally* J. THOMAS MCCARTHY, TRADEMARKS AND UNFAIR COMPETITION § 23 (1996) [hereinafter *McCarthy*]; 15 U.S.C. § 1125(a) (Lanham Act § 43(a)). The related doctrine of dilution may also provide limited protection against certain unauthorized uses of a producer's trademark. Under federal law, a use of a mark that lessens the "capacity of a famous mark to identify and distinguish goods or services" is unlawful. 15 U.S.C. §§ 1125(c)(1), 1127 (definition of "dilution"). *See also* McCarthy § 24.14 (discussing state anti-dilution statutes).

Moreover, it will only protect against those uses of the database that involve the trademark and confuse the consumer as to the database's origin.

5. Contracts

As discussed in section II.A.2 above, database producers are increasingly relying on contractual restrictions to protect their databases against unauthorized use. So far, such contracts have generally survived claims of invalidity based on state contract doctrines such as contracts of adhesion[209] and on preemption by copyright law. The most authoritative and well-known opinion to date is *ProCD v. Zeidenberg*, [210] which held valid and enforceable a shrinkwrap license barring unauthorized commercial uses of a computer program and database, rejecting the argument that a contract preventing unauthorized use of data was preempted by the Copyright Act.

Some have described contractual protection as the most flexible and effective form of legal protection available for databases, since it allows producers to tailor the permissible conditions of use in a manner appropriate to the particular type of database and the particular type of user. For example, as in *ProCD* itself, a producer may adopt a two-tier system of distribution, offering the database at a low price for consumer or non-profit uses, and charging substantially more for commercial uses. Similarly, more restrictive terms can be used for particularly valuable or sensitive items in a database, such as credit ratings.[211]

---

[209] ***But see*** Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 269 (5th Cir. 1988) (affirming district court holding that shrink-wrap software license was a "contract of adhesion" unenforceable under Louisiana law absent a preempted state statute); Shoptalk Ltd. v. Concorde-New Horizons Corp., 897 F. Supp. 144 (S.D.N.Y. 1995) (declining to enforce contractual obligation to pay royalties after the expiration of the copyright in the work for which they were paid).

[210] 86 F.3d 1447 (7th Cir. 1996).

[211] *See* discussion *supra* section II.A.2.b.

Proponents of new legislation agree that contractual protection is an important source of protection for databases. They give a number of reasons, however, why they do not believe it is sufficient.

First is the privity problem: contracts bind only those in privity, not unrelated third parties.[212] So while a contract may suffice to block unwanted activity by the immediate customer, it may not prevent such activity by downstream users. If, for example, a CD-ROM originally sold with a shrink-wrap license is dropped on the street, the person who finds it may place its contents on the Internet without contract liability. Contract protection therefore appears to work particularly well for databases with a limited group of customers that have an ongoing relationship with the database producer. It may be less satisfactory for databases that are sold in hard copy form or marketed through multiple levels of distribution.

A second concern relates to enforcement. The remedies available for breach of contract differ in various respects from those provided by the Copyright Act. Most important is the fact that specific enforcement of a contract is rarely available,[213] whereas injunctive relief is standard in copyright cases and operative throughout the country.[214] In addition, plaintiffs in breach of

---

[212] *See ProCD*, 86 F.3d at 1454 (stating that contracts "generally affect only their parties"); Wilde v. First Federal Sav. & Loan Ass'n, 134 Ill. App. 3d 722, 731, 480 N.E.2d 1236, 1242 (1985) (validly formed contract held not enforceable against one who is not in privity).

[213] *See* E. ALLEN FARNSWORTH, FARNSWORTH ON CONTRACTS §§ 12.4-12.6 (1990) (Supp. 1996) (stating that courts historically have been unwilling to compel performance of contract if legal remedy of damages is adequate to protect injured party).

[214] 17 U.S.C. § 502.

contract actions must prove damages,[215] whereas copyright law provides statutory damages and the possibility of an award of costs and attorney's fees to the prevailing party.[216]

Moreover, contractual protection is a creature of state law only. As a consequence, the law may vary from state to state, with a contract that is effective in one state potentially unenforceable in another. The *ProCD* case itself was based on a federal appeals court's reading of the Wisconsin Uniform Commercial Code.[217]

A related jurisdictional issue raised by proponents is that even if state contract law is relatively consistent, many databases are marketed on a global scale. The contract laws of other countries tend to diverge more widely from the standard U.S. model, sometimes placing greater restrictions on freedom of contract based on each country's conceptions of public policy.[218]

In addition, the enforceability of such contracts is not well settled, and has generated controversy. The *ProCD* case is the view of a single court of appeals, and may not prove to be the ultimate judicial word on the subject. Meanwhile, the ongoing project for the reform of the Uniform Commercial Code, administered by the American Law Institute (ALI) and the National Conference of Commissioners on Uniform State Laws (NCCUSL), includes a proposed Article

---

[215] *See* Restatement (Second) of Contracts § 352 (1981); Uniform Commercial Code (U.C.C.) § 1-106 comment 1; U.C.C. § 2-715 comment 4; Farnsworth, *supra* note 214, at §§ 12.8-12.9.

[216] The Act permits statutory damages "in a sum of not less than $500 or more than $20,000 as the court considers just," and up to $100,000 in the court's discretion for willful infringement. 17 U.S.C. § 504(c). Costs and attorney's fees may be awarded to the prevailing party in the court's discretion. 17 U.S.C. § 505.

[217] ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 651 (W.D. Wisc. 1996), *rev'd*, 86 F.3d (7th Cir. 1996). Although the license for a shrink-wrapped consumer item was held to be governed by U.C.C. art. 2 (sales), courts may not necessarily apply the U.C.C. to other licenses.

[218] *See, e.g.*, Turner Entertainment Co. v. Huston, Court of Appeal of Versailles [France], Combined Civil Chambers, Decision No. 68, Roll No. 615/92 (Dec. 19, 1994) (as translated in 16 Ent. L. Rep. (March 1995)) (declining to enforce employment contract between U.S film studio and U.S. director and screenwriter due to French public policy favoring moral rights). *See also* 1 MELVILLE B. NIMMER AND PAUL EDWARD GELLER, INTERNATIONAL COPYRIGHT LAW AND PRACTICE 198-99 (1993) (discussing enforcement of employment "work for hire" agreements outside United States generally).

2B which would govern transactions in software and licenses in information. "Information" is defined to include data, databases, and "any intellectual property or other rights in information."[219] The issue of whether and to what extent such contracts can provide protection for data, or vary exceptions and limitations contained in the Copyright Act, is under debate.[220]

Finally, the argument has been made that contractual protection may not be optimal from the consumer's point of view. If relegated entirely to contractual self-help, database producers may make their products available only on license terms that are more restrictive than the terms that would be set by federal law. Such a trend may be developing already today, as some producers respond to their insecurity about legal protection after *Feist* by making databases available only with shrinkwrap licenses or on proprietary networks, and only upon terms barring many otherwise permissible uses.[221]

Opponents question the seriousness of the privity problem. They assert that the chief value of many databases lies in their constant updating—especially those comprehensive databases that may not meet *Feist's* creativity standard, and tend by their nature to be dynamic.

---

[219] Article 2B-102(19) (May 5, 1997 Draft). *See generally* Raymond T. Nimmer, *Issues: Meeting the Information Age* (May 3, 1996) <http://www.law.uh.edu/ucc/2b>.

[220] On May 19, 1997, ALI adopted an amendment to the current draft of section 2B-308, which deals with mass market licenses. The amendment reads: "In mass-market licenses, a term that is inconsistent with applicable provisions of the copyright law cannot become part of a contract" under the mass-market section. Transcript, ALI Annual Meeting (May 19, 1997), pp. 33-34. An earlier version of the amendment specifically prohibited terms that are inconsistent with section 102(b) of the Copyright Act, the codification of the idea/expression dichotomy. If adopted into state law, this amendment might be read to overrule *ProCD*'s holding on this point and make it impossible for database producers to rely on contracts to limit the use of data in their databases.

On July 29, however, NCCUSL adopted a motion stating its belief that article 2B should not address the subject of this amendment, "but should adopt a position of neutrality on the issues which are being actively debated at federal and international levels," and suggested that ALI revisit its position.

[221] *See supra* section II.B.

If the producer of such a database suspects leakage, it can cut off access to the offending customer and block the current information flow that makes the database valuable.

In general, opponents stress that the law so far has confirmed the effectiveness of contractual means of protection, and that contracts today are relied on by many database producers. If the law should develop in a different direction, Congress could then consider the issue.

6. Misappropriation

Another existing form of protection for databases is provided by state common law under theories of misappropriation. The seminal case in this area dates back to 1918, when the Supreme Court held that the Associated Press (AP) had a claim against the International News Service (INS) to prevent it from copying news items from the war front gathered by AP at great trouble and expense, and scooping AP by making the items available to INS subscriber newspapers for advance publication.[222]

Although the *INS* decision was based on no-longer extant federal common law,[223] it has been relied on over the years by various state courts in fashioning relief for similar conduct.[224] *INS* was cited by the Supreme Court several times in the 1980s and '90s, including in *Feist*.[225] Congress also referred to it in fashioning the preemption provision of the 1976 Copyright Act.[226]

---

[222] International News Serv. v. Associated Press, 248 U.S. 215 (1918).

[223] *See* Erie R.R. v. Tompkins, 304 U.S. 64, 78 (1938).

[224] *See generally* Douglas G. Baird, *Common Law Intellectual Property and the Legacy of International News Serv. v. Associated Press,* 50 U. CHI. L. REV. 411 (1983).

[225] *See Feist*, 499 U.S. at 354 (stating that legal protection for facts "may in certain circumstances be available under theory of unfair competition"); Carpenter v. United States, 484 U.S. 19, 26 (1987); San Francisco Arts & Athletics v. United States Olympic Comm., 483 U.S. 522, 532 (1987).

[226] 17 U.S.C. § 301. *See* H.R. Rep. No. 1476, 94th Cong., 2d Sess. 132 (1976); S. Rep. No. 473, 94th Cong., 2d Sess. 116 (1976). The reference reads in full:

> "Misappropriation" is not necessarily synonymous with copyright infringement, and thus

The doctrine remained, however, somewhat ill-defined and uncertain in scope, as different courts applied it in different circumstances, sometimes without refined analysis.[227]

The misappropriation doctrine gained renewed clarity and authority earlier this year, when the Second Circuit decided *National Basketball Association v. Motorola, Inc.*[228] In holding that a narrow form of common law misappropriation was not preempted by the Copyright Act, the Second Circuit delineated the elements of the surviving claim, and explained how it differed from copyright. According to the court, protection would be available under New York common law, without preemption, in the following circumstances:

> (i) a plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendant's use of the information constitutes free-riding on the plaintiff's efforts; (iv) the defendant is in direct competition with a product or service offered by the plaintiff; and (v) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive

---

> a cause of action labeled as "misappropriation" is not preempted if it is in fact based neither on a right within the general scope of copyright as specified by section 106 nor on a right equivalent thereto. For example, state law should have the flexibility to afford a remedy (under traditional principles of equity) against a consistent pattern of unauthorized appropriation by a competitor of the facts (i.e., not the literary expression) constituting "hot" news, whether in the traditional mold of *International News Service v. Associated Press*, 248 U.S. 215 (1918), or in the newer form of data updates from scientific, business, or financial data bases. Likewise, a person having no trust or other relationship with the proprietor of a computerized data base should not be immunized from sanctions against electronically or cryptographically breaching the proprietor's security arrangements and accessing the proprietor's data. The unauthorized data access which should be remediable might also be achieved by the intentional interception of data transmissions by wire, microwave or laser transmissions, or by the common unintentional means of "crossed" telephone lines occasioned by errors in switching.
>
> The proprietor of data displayed on the cathode ray tube of a computer terminal should be afforded protection against unauthorized printouts by third parties (with or without improper access), even if the data are not copyrightable . . .

[227] *See, e.g.*, Metropolitan Opera Assoc., Inc. v. Wagner-Nichols Recorder Corp., 101 N.Y.S.2d 483 (Sup. Ct. 1950), *aff'd*, 279 App. Div. 63, 107 N.Y.S.2d 795 (1951).

[228] 105 F.3d 841 (2d Cir. 1997).

> to produce the product or service that its existence or quality would be substantially threatened.[229]

In the case before it, the court held that the National Basketball Association did not have a cause of action because it failed to show free-riding by the defendants or a sufficient competitive effect on the markets for its own products.[230]

Again, those seeking new federal protection acknowledge that the misappropriation doctrine is useful, but assert that it is insufficient for several reasons. First, they identify several potential shortcomings of the doctrine as elucidated by the Second Circuit. Whether or not the result in *Motorola* is appropriate, the court's analysis establishes the "hotness" or timeliness of the data as a necessary element; apart from the question of how hot is "hot," the value of many investment-rich databases may lie in the comprehensiveness of the collection of historical or timeless information. They also note that the commercial value of a database may be significantly harmed by unauthorized uses made by parties that are not in direct commercial competition, such as multiple uses by a member of the database's intended audience or use by a commercial entity in preparing a related but distinct type of database. As under copyright law, they argue that the database producer should be able to protect its ability to exploit potential markets as well as those already being utilized.[231] Finally, the fifth element, relating to the reduction of incentives to produce, has been criticized as relating more to the degree of damage suffered by the database producer than to the nature of the wrongdoing.

More generally, proponents express concern that the tort of misappropriation is not well-defined or established in every state, and therefore leaves unclear where databases are protected and to what extent. The *Motorola* case is one decision in one Circuit, applying the law of one

---

[229] *Id.* at 845.

[230] *Id.* at 853-54.

[231] *Cf.* 17 U.S.C. § 107(4) (in determining fair use, courts are to take into account effect of use on work's potential market).

state; other state laws may be interpreted differently, and other courts may rule differently on the preemption issue. Proponents believe that both greater certainty and national uniformity are necessary for meaningful protection in today's marketplace, especially in the on-line world. With inconsistent approaches in different states, difficult issues of choice of law and jurisdiction are likely to arise. These concerns are magnified in the international context.

Opponents of new protection view the misappropriation doctrine as a strong and effective means of protection, targeting with some precision the type of conduct most likely to cause meaningful commercial harm, while avoiding an impact on beneficial, public interest types of uses. As to the specific critiques of the doctrine described above, some argue that the "hotness" of the data is a reasonable criterion for protection, given the economic value of timely updates and the negatives to be weighed in the balance in protecting information. They also argue that as a policy matter, limiting the legal claim to directly competitive markets is preferable, in order to avoid chilling the development of new, collateral database products. Competitors could then freely use information for different purposes, such as developing specialized niche databases. Or an entrepreneur could analyze historical financial data from the stock exchanges in order to predict future trends for investors.

As to the question of common law versus federal legislation, opponents assert that the courts are so far doing a reasonable job of interpreting and applying the doctrine of misappropriation. They urge that Congress should not step in prematurely where there does not yet appear to be a problem, but rather let the common law continue to develop. Some suggest that, if necessary, Congress instead consider amending section 301 of the Copyright Act to make clear that misappropriation claims are not preempted.

7. Technological Protection

In the increasingly important on-line environment, database publishers, like other creators of intangible materials, are looking to technological means to protect their products against unauthorized use. More and more sophisticated and effective forms are being developed today.

Both owners and users cite such technological measures as critical elements of a workable system of protection, and at least a partial answer to the question of how to deal with the increased vulnerability to piracy in a digital world.

To proponents, such technological means of protection are necessary but not sufficient. The arguments made on both sides generally mirror the arguments that are made in the copyright context. On the one hand, technological protection has the potential to be extremely effective, easier and more economical to rely on than legal rights, and could obviate as a practical matter the need for additional legal protection; on the other hand, such protection is still in developmental stages, can be defeated by technological means of circumvention, does not prevent use of the database once someone has obtained an authorized copy in accessible form, and is effective primarily for databases in electronic form.

Some express concerns that technological protection could be too strong, making database producers completely invulnerable. They fear that producers, able to control every use made on-line, will impose stricter limits and permit less fair use.

8. International Considerations

One final aspect of the asserted need for new legislation is an outgrowth of the larger international context. Proponents point out that the market for databases, especially large and investment-intensive electronic databases, is global in scale. Accordingly, they are concerned not only about the level of protection in the United States, but in other countries as well.

In particular, they point to developments in Europe, where the recent directive on legal protection for databases effectively conditions protection for non-European Union databases on reciprocal protection in the given database's country of origin. In other words, an American database generally will not receive *sui generis* protection in EU member states unless U.S. law provides similar protection to databases.

Proponents argue that as of the beginning of 1998, when the directive's requirements take effect, American database producers will therefore be at a competitive disadvantage in Europe,

one of the biggest markets for such works, as compared to their European counterparts. The latter will be able to control and profit from the use of their products, while the American producers will not. Related risks to market share are that U.S. producers will need to adopt more restrictive and less user-friendly contracts than their foreign competitors, and will not be able to operate safely in those jurisdictions where on-line or shrink-wrap contracts may not be respected. Concern is also expressed as to the effect on other countries outside the European Union of a failure to provide statutory protection in the United States, particularly those countries where piracy of U.S. works is a major problem today.

If, on the other hand, American database producers choose to avail themselves of the directive's alternate route to protection by establishing a commercial presence within the European Union, proponents argue that the result will be a loss of jobs in the United States, with a corresponding detriment to the U.S. economy.

Opponents state that the United States should not follow Europe unless it is convinced that the European approach is a good idea. Rather, the United States should take the lead in establishing appropriate intellectual property policy, and seek to persuade the European Union and others to adopt our approach. This is particularly true, they argue, in areas relating to the use of government data, where the U.S. approach has historically differed from that of many European nations. There has long been controversy between the United States and Europe over appropriate treatment of such data, with the United States championing a policy of full and open access.[232]

---

[232] The U.S. government has been engaged for several years in espousing international agreements regarding full and open access to data. A multilateral policy to this effect was recently adopted in the World Meteorological Organization (WMO), with member countries agreeing to provide free and unrestricted exchange of meteorological and related data. WMO Policy and Practice for the Exchange of Meteorological and Related Data and Products Including Guidelines on Relationships in Commercial Meteorological Activities (WMO Resolution 40 (Cg-XII)) (1995). Numerous policy statements from international organizations and conferences, including the United Nations and the Organization for Economic Cooperation and Development, affirm this same goal in the context of other scientific disciplines as well.

Some opponents are concerned about potential negative international implications from enactment of new protection. They agree that markets are international in scope. Scientific research in particular increasingly involves international collaboration and the sharing of data collected globally. Several countries may participate in producing and maintaining a database, such as the database of DNA sequencing information created by the U.S., Japan and Europe. Research today requires the use of data sets from around the world. Science agencies caution that the United States should not send the wrong signal to other countries, and risk encouraging governments to allow control of access to information, especially in a time of increasing budgetary constraints and corresponding commercialization of scientific data.[233]

Moreover, opponents express doubt that all member states of the European Union will have *sui generis* legislation in place by 1998, and believe it is uncertain what form such legislation might take. Even assuming the directive is fully implemented, they question whether it creates a real need for action. They assert that U.S. database producers will be no worse off in Europe than they are today, when *sui generis* protection does not exist, since they will merely fail to obtain the benefit of an *added* level of protection.[234] They also point out that some U.S. producers already qualify for protection under the directive because they have a place of business in a member state, and those that do not can simply establish one.

Opponents question predictions of a meaningful competitive disadvantage. Rather, they believe any advantage to European producers will be only marginal. If a significant problem does arise, they argue, Congress can then respond.

---

[233] Past proposals in the United States have made clear that there would be no protection for government data.. *See* H.R. 3531 § 3(c). Other countries, however, might choose to proceed differently (as they have in the area of copyright). *See, e.g.*, Hong Kong Copyright Ordinance, Ord. No. 92 of 1997 §§ 182-186 (1997); United Kingdom Copyrights, Designs and Patents Act of 1988 §§ 163-167 (1988).

[234] While the Directive will lower the level of copyright protection in some member states, it will raise the level in others. *See* discussion *supra* section IV.B. Accordingly, if *sui generis* protection is not provided to U.S. database producers in the European Union, they are likely to have less protection than today in some places and more in others.

Finally, opponents suggest that the directive's failure to provide national treatment may be challenged as an impermissible trade practice, inconsistent with existing treaty obligations, or as an inappropriate approach to intellectual property in a global marketplace.

C. Form of Any New Protection

If Congress determines that a need has been established for additional protection, the next question is what form that protection should take. Two basic models have been proposed, both in the United States and in the course of debate over the directive in the European Union: (1) an exclusive property right; or (2) some form of unfair competition law, focusing on the nature of the conduct prohibited rather than providing ownership rights in particular subject matter.

The final version of the European directive adopts an exclusive property right model, as did the treaty proposals put on the table in WIPO last year and, at least arguably, the bill introduced in the 104th Congress. These approaches all provided database makers with certain specified rights in defined subject matter, lasting for a set period of time, transferable by contract, and subject to potential exceptions and limitations.

In contrast, an unfair competition model would not confer rights owned and enforceable against the world, but would make it unlawful to engage in conduct identified in some way as unfair.[235] It would be closer to concepts contained in the Lanham Act, and embodied in the misappropriation doctrine set out in the *INS* and *Motorola* cases.

A federal misappropriation statute need not adopt every element of the state law claim outlined in *Motorola*, however, or in the same way. In the context of federal legislation, those

---

[235] Arguably, unfair competition principles were the true basis of the pre-*Feist* sweat of the brow directory cases. Commentators have noted the "reaping where one has not sown" language and rationale of many of the opinions. *See, e.g.*, Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1880-81 (1990). These cases generally involved commercial, competitive uses (although sometimes in related or potential, rather than directly overlapping, markets).

elements that may be necessary to avoid preemption are not necessarily required, since in this context Congress itself would be determining where to draw the line between protection and free use. The issues would rather be the sufficiency of coverage of such legislation, and its compatibility with any constraints imposed by the Constitution.[236]

The choice between the two models has many potential ramifications. Depending on how it is drafted, an unfair competition model could obviate the need for definitions, for exceptions, or for a defined term of protection. The international consequences could also be quite different; in particular, an approach that differed significantly from the model of the European directive might not trigger reciprocal protection for U.S. databases in the member states. Finally, as discussed below, the two models may have differing constitutional implications.

Nevertheless, choosing one model or the other would only be the beginning. Much would turn on the precise delineation of either approach—how the scope of the rights are defined, or what conduct is proscribed. Many of the questions raised in the discussion of the remaining issues below would still need to be resolved.

As discussed above in section IV.B, the European Commission began with an unfair competition model, but ultimately adopted a property rights model in its Directive. The Commission has given several reasons for its change in approach, primarily: (1) the lack of established unfair competition laws in every country; (2) the need for producers to know what they own ahead of time, rather than waiting until someone engages in a use which a court finds wrongful; and (3) the commercial transferability of property rights.[237]

Proponents prefer the property rights model for these and other reasons. While their greatest concern may be unfair commercial conduct, and protection against free-riding, they

---

[236] *See infra* section VII. G.

[237] See Submission from the European Community and its Member States to the World Intellectual Property Organization on "An International Treaty on the Protection of Databases," p. 2 (July 1997).

point out that serious damage can be caused by an irresponsible user even without the elements of competition or profit. Proponents also are reluctant to rely on the existing state law misappropriation doctrine, given its checkered and ambiguous history. Their specific dissatisfactions with the *Motorola* formulation are described in more detail above.[238]

Among the opposing groups, and some neutral groups with specific concerns, there was a strong preference for the unfair competition model. While some felt that no need had been established for any legislation, and that it was preferable to let the courts continue to develop the common law, they were less uncomfortable with the former model than the latter. A number of the concerns they expressed with regard to last year's proposals appeared to be ameliorated by such an approach. The more limited the formulation of unfair competition, and the closer to the Second Circuit's formulation in *Motorola*, the less objectionable some found it.

A few participants sought as much specificity as possible. They wished to avoid the uncertainty inherent in a general mandate to the courts to prevent conduct determined to be unfair. They urged that Congress take care not to adopt a law which would lead to litigation in every case over the legitimacy of the purpose for which data was taken. One scholar has suggested that users as well as producers would benefit from a clear statute establishing what types of use are and are not permissible, rather than continuing to rely on an ill-defined, potentially overbroad judge-made doctrine.[239]

---

[238] *See supra* section VII.B.5.

[239] *See* Ginsburg, *supra* note 70. In this regard, it is interesting to note the reason for Justice Brandeis's dissent in *INS v. AP*. He believed that a remedy should exist for INS's conduct, but that such a claim should be provided by the legislature rather than by court-established common law. 248 U.S. at 267.

D. Definitions

During the meetings, there was extensive discussion of the definitions used in the draft WIPO treaty and in last year's bill. In particular, participants focused on the definitions of "database," "substantial investment," and "substantial part" or its converse, "insubstantial part." While it was not assumed that the language from either of these proposals would be used this year, similar definitional issues may arise with any new proposals.

The definition of "database" raises the question of what exactly is the subject matter to be protected—a question that is integrally related to the nature and scope of the protection. All who commented on this question agreed that it is important to define the subject matter in such a way as not to sweep too broadly, and cover material that is not intended to be covered. Many pointed out that it is difficult to articulate a precise enough definition; some believed it to be impossible. There was substantial criticism of the definition of "database" in H.R. 3531 on this ground.

The following range of concerns was expressed: A broad definition, focusing on the collection of data in a systematic or accessible way, could be read to cover virtually everything in digital form. Even a motion picture or novel might qualify, as a systematically organized collection of 0s and 1s. Other collections of information, not ordinarily thought of as databases, might fall within the definition, such as on-line scientific discussions, scientific papers presenting research results, or an art historian's slide collection placed on-line. Computer programs, which are defined in the Copyright Act as a "set of statements or instructions," could be covered.[240]

Moreover, various building blocks of the Internet might be considered to qualify as databases, such as web sites, routing tables, domain name servers and interface specifications. If so, free access to these building blocks could be impaired, hindering interoperability and impeding the functioning of the Internet.

---

[240] *See* 17 U.S.C. § 101 (definition of "computer program"). In response to such concerns, the European Directive, the WIPO Draft Treaty and H.R. 3531 each included some form of a carve-out for computer programs. Database Directive art. 1(3); WIPO Draft Treaty art. 1(4); H.R. 3531 § 3(d).

The video rental industry has a specific concern that the definition could cover videotapes, digital video disks, videogames or multimedia works generally, for example where a disk contains a movie combined with several previews or advertisements. Depending on how the form of protection was structured,[241] the result of including such items within the definition could be to establish for the first time in U.S. law a rental right for audiovisual works, making it impossible for companies like Blockbuster to continue their current rental business without obtaining licenses. It was suggested that one way to resolve this concern might be to require a minimum number of items to be collected in order for the collection to qualify as a database.[242]

The scientific and educational communities in particular stressed the need to ensure that government data did not fall within the definition of protected subject matter. They believe this is even more important in the context of data than in the context of copyrightable subject matter. This goal could be accomplished through a specific exclusion, similar to that provided by H.R. 3531. The bill excluded databases produced by any government, in broader terms than the exclusion for U.S. government works in the Copyright Act,[243] covering state and local governments as well as federal. Other possibilities would be an explicit exclusion of databases produced for the government by independent contractors as well as employees, or otherwise produced through the use of government funding, or databases produced by a private entity using data obtained from the government on an exclusive basis.[244] In considering this issue, it should be borne in mind that some databases are created by international partnerships, and that treatment of government data may vary from country to country.

---

[241] If, for example, rental was not included within the scope of any protection granted, this concern would not be a problem.

[242] *Cf.* Compendium, § 307.01 (establishing minimum numerical requirement of more than three items for work to be registered as compilation).

[243] 17 U.S.C. § 105.

[244] *See* discussion of sole source databases *infra* section VII.F.

Proponents do not seek to protect government data itself, but stress the importance of providing incentives to private entities to create new, useful databases by investing in adding value to government data.[245]

The definition of "substantial investment" raises the issue of the criterion for protection. What kind of investment, and how much, should be required? The major concern expressed in the meetings related to the situation where someone takes a preexisting collection of data, and by adding limited value to it, obtains legal rights. This was identified as particularly problematic in the context of a private party adapting government or other public domain data in some way, involving no meaningful contribution of skill, judgment, or even effort, such as formatting or adding page numbers, and then asserting control over its use. A number of participants stressed that significant added value should be required in order to obtain rights (and that the underlying information must remain available to others).

This issue is related to the question of duration, discussed below. If every new substantial investment qualifies a database for a new term of protection, the question of what constitutes a substantial investment is critical to how long protection will last. A low standard that requires only automated updating or reformatting could allow perpetual protection with little public benefit to justify it. On the other hand, a standard that is extremely high could obviate incentives for making expensive investments in researching and checking the information on a timely basis, and result in less useful databases.

The definition of "substantial part," or its converse, "insubstantial part," raises the issue of the scope of protection—i.e., what can be taken without implicating the legal rights. The European directive as well as the WIPO and legislative proposals last year provided protection against the taking of all or a substantial part of a database, excluding insubstantial portions from

---

[245] The OCLC database, for example, discussed *supra* in section III.B.1, adds value to Library of Congress catalogue records available through the Government Printing Office by providing codes identifying libraries around the world that have a given work in their collections.

protection in themselves.[246] This aspect of database protection is critical in ensuring that ordinary consumer or research use will be permissible without the need to obtain consent. Under all three prior models, a student could locate and extract from a database particular items of interest to him or her without implicating the producer's rights.

In several of the Copyright Office meetings, concern was expressed that the terms used were vague, and that the taking of a single piece or small subset of data, if it were important or valuable, could be found by a court to be qualitatively substantial. The question was asked, for example, whether all sports scores from one particular game would be substantial. In addition, the WIPO draft treaty and H.R. 3531 each contained an exception to the general exclusion of insubstantial parts, in circumstances where those parts are accumulated in such a way as to affect the market for the database.[247] Journalists and educators in particular were concerned about the possible impact of such an exception on news gathering and educational activities.

In response to the questions raised about the meaning of "substantial" and "insubstantial," proponents point out that courts regularly interpret concepts of quantitative and qualitative "substantiality" and "materiality" in dealing with copyright and other bodies of law.

A few participants in the meetings suggested that some or all of the definitional questions could be avoided if an unfair competition model was chosen rather than a property rights model. By focusing on the nature of the conduct and the harm caused, rather than on the process of collecting the material itself, it might not be necessary to define precisely what material is and is not subject to protection.

---

[246] Directive art. 8(1); WIPO Draft Treaty art. 2(v); H.R. 3531 §§ 2 (defining "insubstantial part") and 5(a) (1996).

[247] *See supra* sections IV.C and V.

E. Public Interest Uses

One fundamental concern was articulated by virtually all of the groups we met with that described themselves at least in part as database users. They identified certain activities with public interest elements that they urged should be allowed to continue without new restrictions on the ability to use data or new costs in doing so—primarily scientific, research and educational activities and news reporting. Each of these activities may span the range from non-profit to commercial in nature. Particular concern was expressed about the use of government and scientific data, sports statistics and financial data.

Analytically, there are various ways in which this concern could be addressed. One possibility relates to the form of protection chosen; depending on how it is articulated, a statute based on unfair competition is likely not to cover many such activities. If an exclusive property rights model is chosen instead, the scope of the rights granted could be drafted in such a way as to exclude such activities as appropriate.[248]

The exclusion from protection of insubstantial portions of a database helps but does not fully resolve the problem. While much education, research and reporting may rely on individual facts or small subsets of information, in some circumstances users need to extract substantial portions or all of a database in order to analyze its contents and draw conclusions. Thus, scientists often must analyze entire data sets in order to make findings and corroborate the research results of others, and may need to republish the background research for credibility. Public advocacy groups or reporters may need to examine substantial portions of a database to understand fully the scope of an issue.

Another possibility would be to provide an explicit exception or exceptions to cover those activities that Congress decides should be permitted without the need to obtain authorization.

---

[248] *Cf.* H.R. 3531 § 4(a) (right is violated only by use "that conflicts with the database owner's normal exploitation of the database or adversely affects the actual or potential market for the database").

This could be accomplished through a broad, general exception similar to the fair use defense in copyright law; through detailed, specific exceptions more like the exceptions to a copyright owner's rights embodied in sections 108-121 of the Copyright Act; or through a combination of the two approaches.

A fair use-type approach provides several advantages. It is familiar and well-developed through judicial interpretation in the copyright context; it allows tremendous flexibility in adapting to particular factual circumstances;[249] and it fits easily within the framework of guidelines for exceptions to rights within existing international intellectual property treaties.[250] On the other hand, there are disadvantages too. A fair-use type approach is unpredictable in its outcome in any given case, and therefore gives little certainty to users. It could also make the new form of protection appear more like copyright, raising the potential constitutional issue discussed below in section VII.G.

The specific exemptions approach presents the flip side of many of these advantages and disadvantages.

Finally, some have suggested the possibility of compulsory licenses for certain socially favored types of uses.[251] The rationale is that this would ensure the availability of data, while enabling the setting of a reasonable price. As a general rule, compulsory licenses are not favored in intellectual property law, which ordinarily relies on the marketplace, allowing rightholders

---

[249] The copyright fair use doctrine allows distinctions to be drawn between commercial and non-profit types of use, while recognizing that even the former may in appropriate circumstances qualify as fair. *See, e.g.*, Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1992).

[250] *See* Berne Convention, art. 9(2); TRIPs, art. 13; WIPO Copyright Treaty, art. 10; WIPO Performances and Phonograms Treaty, art. 16. While the limitations on exceptions in these treaties may not apply to *sui generis* database protection, they represent a general approach toward exceptions that has achieved international acceptance.

[251] *See* Reichman & Samuelson, *supra* note 145, at 146-148.

freely to negotiate terms with users.[252] In some circumstances, however, Congress has found such licenses appropriate, typically where there is a new, struggling industry that Congress decides to assist, or some practical difficulty in achieving a negotiated solution.[253]

This leads to the question whether the marketplace can appropriately handle non-profit scientific and educational uses. Some databases are produced specifically for this market; others have both commercial and non-profit uses. As described in section II above, many database producers today engage in differential pricing. That is, they provide different terms for different types of uses, generally making databases available for much lower prices to nonprofit, scientific, library or educational users than to commercial users. In essence, the commercial users subsidize the non-commercial, allowing the producer to make a profit or at least cover costs. It is unclear whether or not enacting a new form of protection would alter this practice, or tend to raise prices overall, making access to data less affordable.

F. Duration

How long should protection last? All agree that, in theory, it should last just long enough to provide adequate incentives by allowing a fair return on investment. The difficulty lies in determining how long that period is. As with any form of intangible creation, it is complicated by the fact that different types of databases may need different terms to ensure a fair return. An extremely popular database of current and volatile data may recover costs in a much shorter time than an historical database requiring extensive research and appealing to a specialized audience. The challenge is to devise a term that works across the board, in order to encourage the production of all types of databases.

---

[252] *See, e.g.*, Paul Goldstein, *Preempted State Doctrines, Involuntary Transfers and Compulsory Licenses: Testing the Limits of Copyright*, 24 U.C.L.A. L. REV. 1107, 1135-36 (1977).

[253] *See, e.g.*, 17 U.S.C. §§ 111, 115 and 119. One approach taken has been to provide for compulsory arbitration if the parties cannot agree as to royalty rates and terms. *See, e.g.*, 17 U.S.C. § 115(c)(3)(D).

A number of possibilities have been suggested.[254] The longest is the 25-year term proposed in last year's bill.[255] The European directive requires a term of 15 years. The "catalogue rule" now in existence in some Nordic countries sets a term of 10 years. The "misappropriation" doctrine as set out in *INS* and *Motorola* suggests that protection may last as long as the data has value or as long as it is "hot"—i.e., new and timely. Such a term could vary for different databases, depending on the nature of the data, the particular market, and the state of communications technology. For example, stock prices today may be valuable or "hot" for only fifteen minutes, while pre-television news from the front in World War I may have been "hot" for 24 hours or more.[256]

The discussion so far has dealt with the basic, initial term. The more difficult aspect of duration relates to changes made in a database, for example in the process of updating or verifying its contents. Proponents of legislation argue that a database should be protected as long as its producer continues to make substantial investments in maintaining it. For some databases, they report that producers spend many millions of dollars a year in updating and verifying the information they contain. They assert that there are equivalent public policy justifications for providing incentives to invest in keeping an existing database comprehensive, timely and accurate.

Last year's bill dealt with this issue by providing that "any change of commercial significance" to an existing database, including by making additions, deletions or verifications,

---

[254] Professors Reichman and Samuelson have suggested a combination of a short initial term, followed by a period where various compulsory licenses are in effect for different types of uses. *See* Reichman & Samuelson, *supra* note 145, at 147-48.

[255] This term is considerably shorter than the term of protection for copyright. Most databases are works made for hire, and their copyright term would therefore last for seventy-five years from publication or one hundred years from creation, whichever expires first. 17 U.S.C. § 302(c).

[256] *See* International News Serv. v. Associated Press, 248 U.S. 215 (1918).

qualified the changed database for its own new term of protection.[257] The WIPO draft treaty narrowed this language by adding the phrase "which constitute a new substantial investment" (the criterion for protection under the treaty).[258] These provisions were controversial because they could be read to create a system of perpetual protection; as long as a database continued to be updated, new terms of protection could attach *ad infinitum*. This raised both policy and constitutional questions. Should Congress create a form of intangible property that could last forever? And would doing so violate the "limited times" restriction in the Copyright Clause of the Constitution?[259]

It also raised the question of what level of investment would be sufficient to qualify for an additional term. If the threshold is too low, there may be little justification for such extended protection (particularly given the ease of making modifications in the digital age). If the requisite "substantial investment" is defined to be high enough, however, and the same level of investment is made that would qualify a new database for an initial term of protection, the argument has been made that protection should not be ruled out, simply because the comparable investment was made in updating and maintaining an existing database rather than creating a new one.

This treatment of changes made to existing databases parallels the treatment of changes to existing works of authorship in copyright law. When such a work is created today, it generally receives an initial term of protection measured by the life of the author plus fifty years.[260] If someone lawfully makes changes to the work that in themselves qualify as creative authorship,

---

[257] H.R. 3531§ 6(b).

[258] Draft Database Treaty, arts. 1(1), 8(3). *Cf.* Database Directive, art. 10(3) ("Any substantial change . . . which would result in the database being considered to be a substantial new investment").

[259] U.S. CONST. art. I, § 8, cl. 8 (1789). *See* discussion *infra* section VII.G.1.

[260] 17 U.S.C. § 304.

the result is a derivative work, which is entitled to its own term of protection of life plus fifty.[261] The result is not perpetual protection, however; the Copyright Act states explicitly that this new term of protection is independent of and does not affect or enlarge the duration of any copyright in the preexisting work.[262]

One way to dispel the specter of perpetual protection might be to make explicit in any database legislation that the term of protection for the preexisting database is not extended when a new term attaches to a changed version. This would clarify the problem conceptually, and ensure that protection would expire in due course for the old version of the database. Thus, for example, if the West Publishing Company published a new version of its Federal Reporter series, with corrections to some older cases and incorporating new decisions, it would receive a full term of protection for the new version. Anyone would be free, however, to copy in its entirety the prior version of the series, once its set term of years had expired (if it was not protected by copyright).

The remaining problem is a practical one. This solution will work for databases like the West reporters, to the extent that they are available in their original form. Databases available only on-line, however, may be constantly refreshed and not available to the public in their older form. Moreover, it may be impossible to determine which aspects of the database are new and which aspects were found in the prior version. The same problem exists today under copyright law. If the original work is not available, the fact that its term of protection has expired may not help a would-be user who has access only to a derivative work, particularly in situations where the preexisting material cannot easily be separated from the new matter.

It has been suggested that this issue too might be resolved by the choice of an unfair competition model rather than a property rights model. Again, the focus would be on fairness

---

[261] *Id.* §§ 101 (defining "derivative work"), 103(a).

[262] *Id.* § 103(b).

and commercial harm, rather than on the nature of the material taken. Protection could exist for as long as an investment of continued value was being taken unfairly.[263]

G. Sole Source Data

In theory, the answer to many of the concerns that have been expressed about restricting the availability of data is that, regardless of what model of protection is chosen, the database producer would not own the data in itself. The producer's rights would extend to its own particular database as an entity, but not the items collected in the database. In other words, anyone would remain free to obtain all of the same data from other sources. Thus, the legal protection would ensure that the database maker could protect the fruits of its investment in collecting and presenting data, but would leave others able to make their own collection of the same data. No participant at the meetings expressed disagreement with the concept of such a limitation, which could be explicitly stated in any legislation.[264]

Nevertheless, there are circumstances in which this answer alone may be unsatisfactory. When the data is not available elsewhere, the ability to prevent its extraction from the database may in effect amount to ownership of the data itself. The two prototypical examples of "sole source" data contained in a database are (1) government data provided to a private producer on an exclusive basis; and (2) data generated by the database maker itself. Included in the latter category are telephone subscriber information, sports statistics, and trading data from financial

---

[263] A comparison might be drawn to another branch of unfair competition, trademark law, under which rights exist as long as a mark continues to be used in commerce and to have value in identifying the source of the goods or services. *See* 15 U.S.C. §§ 1051, 1059 (Lanham Act §§ 1, 9).

[264] *Cf.* H.R. 3531 § 5(b) ("[N]othing in this Act shall in any way restrict any person from independently collecting, assembling or compiling works, data or materials from sources other than a database subject to this Act"); defense of "independent creation" in copyright law. *See, e.g.*, Mazer v. Stein, 347 U.S. 201, 218 (1954) ("Absent copying there can be no infringement of copyright").

markets.[265] Unless the producer chooses to make such data freely available, it is simply not possible for anyone else to obtain it independently.[266]

This is a complex issue, involving diverse types of databases and touching on a wide variety of policy implications. We present here some general points raised in the meetings as a preliminary stage in the analysis.

A variety of mechanisms have been proposed to deal with sole source databases. Broadly categorized, they are: exclusions from protection; compulsory licenses; and regulation through other bodies of law such as antitrust or industry-specific government oversight. A combination of these approaches could also be considered, allowing greater fine-tuning to the nature of the database and its market.

A complete exclusion from protection is the most drastic approach, as it will result in a loss of the legal incentive to produce the database in question. This approach therefore implies a policy decision not to provide such an incentive for that type of database, and the absence of suitable, less drastic alternatives to ensure the availability of data.

The least controversial case for an exclusion from protection is the category of government data made available to the database producer on an exclusive basis. This issue implicates general U.S. policies about the conditions on which government data is made

---

[265] Other examples mentioned in the meetings included situations where the database producer may be the only entity in possession of the underlying information, for example where the original source no longer exists or has not retained the information; and situations where information may be available elsewhere but not in the "official" form demanded by users, such as sports league statistics or legal citations. *Cf.* H.R. 1584 and H.R. 1822, 104th Cong., 1st Sess. (1995) (barring, under certain circumstances, Federal and State courts and agencies from requiring a single citation form in which copyright subsists).

[266] We do not suggest that all of the examples given should be treated in the same way. Different types of sole source data may raise different considerations, particularly with regard to the degree of justification for protection and the degree of need for access. Sports statistics in particular may be available as a practical matter through a variety of sources because the games are widely disseminated by television and radio broadcasts. *See, e.g.*, NBA v. Motorola, Inc., 105 F.3d (2d Cir. 1997) (scores obtained by defendant from television and radio).

available to the public. Under current law, federal agencies are generally prohibited from entering into exclusive or restricted agreements for distribution of public information "that interferes with [its] timely and equitable availability to the public."[267] Nevertheless, the statute contains some exceptions, and other countries have different rules. The policy favoring free access to government data could be undermined if a single entity were permitted to control access through its database, with the public unable to obtain the data directly from the government or any third-party provider.[268] This result could be avoided by broadening any statutory exclusion of databases created by a government entity to encompass databases created from government data that has been made available on exclusive terms to the database producer.[269]

The compulsory license approach may be seen as a middle ground, allowing producers to benefit financially from the use of their products but removing their ability to control the nature or price of the use. As discussed above, however, compulsory licenses are generally disfavored in intellectual property law, and adopted only as a last resort in circumstances where the free market does not function well. The idea of a compulsory license for sole source databases was proposed in Europe in the initial stages of the database directive, but abandoned as part of an overall compromise when it proved controversial.[270]

---

[267] 44 U.S.C. § 3506(d)(4).

[268] Under current law the data usually remains available from the government, but without the added value provided by the private sector producer. Government contracts for the publication of information generally require a continued non-exclusive license for the government to use the information and make it available to others, and may also require the producer to provide the information to the government in a more accessible form (e.g., automated). For example, the catalogue entries for copyright registrations from 1978 to date are available on-line through the Library of Congress. Those records are also available in a more accessible, user-friendly form from DIALOG Information Services, Inc., which provides a powerful search engine to its users.

[269] The related issue of how to treat arrangements that are exclusive not as a legal matter but *de facto* is discussed below.

[270] *See* discussion *supra* section IV.B.

The third possibility is to deal with this issue as a question of appropriate government control of business activities. This could be done through the application of antitrust law generally, or through regulation of a particular industry, such as through the Federal Communications Commission for the telecommunications industry or through the Securities Exchange Commission for securities markets. These are areas where Congress has determined that a regulatory scheme is advisable in order to balance the interests of the industries and the public.

An example of the antitrust approach is the *Magill* decision in the European Court of Justice, which held that television broadcasters could not rely on their compilation copyrights to prevent the copying of self-generated programming information by others wishing to publish competing television program guides.[271] Reliance on such competition law represents the route taken, at least at present, by the European Union.[272]

As to telephone subscriber information, Congress has already acted to ensure that this information is accessible to others. The Telecommunications Act of 1996 requires telecommunications carriers to provide non-discriminatory access to telephone numbers and directory listings.[273] A number of participants in the Copyright Office meetings urged that this legislative compromise not be reversed or undermined by any new database legislation. One

---

[271] Radio Telefis Eireann v. European Commission, Court of Justice of the European Communities [1995] All ER 416, [1995] FSR 530 (April 6, 1995). Similar antitrust claims have been made by defendants in copyright infringement cases in the United States, with mixed success. The defendant in *Feist*, for example, successfully asserted an antitrust counterclaim in the district court. Rural Tel. Serv. Co. v. Feist Publications, Inc., 737 F. Supp. 610 (D. Kan. 1990). That judgment was overturned on appeal. 957 F. 2d 765 (10th Cir. 1992).

[272] *See supra,* section IV.B.

[273] Telecommunications Act of 1996, Pub. L. No. 104-104, § 222(e), 110 Stat. 56, 61, 62 (1996) (codified at 47 U.S.C. § 222(e)).

way to address their concern would be an explicit safeguard clause stating that nothing in the legislation affects that provision of the Telecommunications Act.[274]

Sports statistics, including the scores of individual games, is a topic that has elicited a great deal of concern, as well as litigation. Specifically, the view has been expressed that sports leagues and teams should not be able to prevent others from reporting on and communicating these facts. Those expressing this view include newspapers, broadcasters and consumers as well as those in the business of compiling and marketing such information. Stock exchange trading information presents similar issues. It may be important for news organizations or financial analysts to be able to report and transmit information about current stock prices, available only through the services of the particular exchange.

For both of these examples, the timeliness of the data is likely to be critical, given the audiences for information as the game is played, or for prices for immediate purchase. Another variable is the extent to which others have a legitimate need to extract more than an insubstantial amount of such information—i.e., not just trading prices of particular stocks, or the outcome of the third inning of a game.

Finally, arguments have been made for special treatment of databases which are not literally sole sources, but may be the only economically feasible sources of particular data. While others can in theory independently obtain the data elsewhere, doing so is prohibitively expensive or economically wasteful. This may be the case where the data requires substantial time and effort to obtain or the database has a narrow niche market (such as a small scientific subspecialty), and no other producer has the resources or ability meaningfully to compete with a first comer. The greatest area of concern expressed is the database produced by a single producer

---

[274] *Cf.* H.R. 3531, § 9(c) ("Nothing in this Act shall prejudice provisions concerning copyright, rights related to copyright or any other rights or obligations in the database or its contents, including laws in respect of patent, trademark, design rights, antitrust or competition, trade secrets, data protection and privacy, access to public documents, and the law of contract").

from government data, where the data is not made available by the government in usable form. Although federal agencies are prohibited from awarding exclusive contracts for this purpose, in many cases the reality may be that only one producer enters into a contract for a particular set of data.

Such databases appear to present somewhat different policy questions than literally sole source databases. On the one hand, there is a public interest in easier, cheaper access to data for users. On the other hand, presumably in these circumstances the database producer has had to make a proportionally higher investment to obtain the data, or take greater risks. It may be that the markets for such databases cannot support more than one producer. It is unclear whether granting new legal protection will change these circumstances, either exacerbating a lack of competition or encouraging more.

On the sole source issue too, the form and scope of any new protection may be key. Within the context of an unfair competition model, the use of such a database for non-competitive purposes may be permissible. Moreover, the misappropriation doctrine could allow distinctions based on the "hotness" of the data, giving its producer some lead time in exploiting the market, but then making the data available for third-party use. If one adopts a property rights model instead, the question will be the scope of the rights and how any exceptions are drawn.

H. Constitutionality

One other set of issues requires consideration, although they were not discussed in depth at the Copyright Office meetings: the constitutional implications of any new legislation in this area. Two primary issues have been identified: (1) possible constraints imposed on Congressional power to legislate in this area by the language of the Copyright Clause;[275] and (2)

---

[275] U.S. CONST., art. I, sec. 8, cl. 8 (authorizing Congress to grant copyrights and patents by giving it the power "to promote the Progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.") [hereinafter, the

First Amendment limitations. We provide here an outline of the nature of the problems rather than an in-depth analysis.

1. Copyright Clause

The Copyright Clause imposes certain restrictions on Congress's ability to enact copyright legislation. The text itself makes clear that copyrights cannot be of indefinite duration, but can only be granted "for limited times." In addition, the Supreme Court in *Feist* held that Congress could not constitutionally provide copyright protection based on "sweat of the brow," but could only protect works of authorship embodying a modicum of creativity. The questions are then whether Congress can provide protection for "sweat" or investment without creativity under a different Article I power, most likely under the Commerce Clause,[276] and whether any such protection must incorporate a limited term. The answers to these questions are not entirely clear. They may depend in part on the form of protection that is chosen, and the extent to which it differs from copyright in both end and means.

It has long been accepted that Congress has the power to enact trademark legislation under the Commerce Clause, despite the fact that trademarks may be seen as a form of intellectual property; that trademark law protects material that does not meet standards for copyright or patent protection; and that the protection may last indefinitely. The Supreme Court's opinion in *The Trademark Cases*[277] held unconstitutional an early attempt by Congress to enact a trademark law, based on a lack of Congressional power under either the Copyright Clause or the Commerce Clause. According to the Court, the Copyright Clause did not provide authority for the legislation because trademarks have different "essential characteristics" from inventions or writings, since they are the result of use (often of already-existing material) rather

---

Copyright Clause].

[276] U.S. CONST., art. I, sec. 8, cl. 3.

[277] 100 U.S. 82 (1879).

than invention or creation, and do not depend on novelty or originality.[278] The Commerce Clause did not provide authority because the law governed *all* commerce and was not limited to interstate or foreign commerce, "the kind of commerce which Congress is authorized to regulate."[279] The opinion suggests that similar legislation limited as to the type of commerce involved would pass constitutional muster under the Commerce Clause. Indeed, such legislation was subsequently enacted and has continued unchallenged since 1905.

To the extent that database protection promotes different policies from copyright protection, and does so in a different manner, it is similar to trademark law, and therefore seems likely to survive a constitutional challenge.

Some doubt is created, however, by a 1982 Supreme Court decision dealing with the interaction of the Commerce Clause with another enumerated Article I power of Congress, the Bankruptcy Clause. In *Railway Labor Executives' Association v. Gibbons*,[280] the Court struck down a statute enacted to provide protection to the employees of a railroad in bankruptcy, on the ground that this was prohibited by the "uniformity" requirement of the Bankruptcy Clause, and Congress could not evade this prohibition by legislating under the Commerce Clause. The opinion therefore suggests that Congress cannot necessarily rely on the generality of the Commerce Clause to evade specific restrictions set out in other enumerated powers.[281]

Nevertheless, it seems possible to distinguish *Railway Labor*, and reconcile it with the implications of *The Trademark Cases*. In *Railway Labor*, the statute at issue by its terms regulated the administration of a bankruptcy, so that the Commerce Clause was being used to

---

[278] *Id.* at 93-94.

[279] *Id.* at 97.

[280] 455 U.S. 457 (1982).

[281] *See* Jane C. Ginsburg, *No 'Sweat' ? Copyright and Other Protection of Works of Information After Feist v. Rural Telephone*, 92 COLUM. L. REV. 338, 370 (1992).

enact a bankruptcy statute without abiding by the restrictions of the Bankruptcy Clause. Protecting the investment in databases may be seen as distinct from protecting original authorship through copyright, and therefore avoid running afoul of the specific restrictions in the Copyright Clause. In *Feist* itself, the Court suggested that protection for "sweat" could appropriately be provided under a different legal theory, despite the fact that it could not be provided under copyright law. If, however, database legislation appears to be the equivalent of copyright under another name, but providing protection to uncopyrightable subject matter for unlimited times, the use of a different label and the recitation of a different constitutional basis will not alone be sufficient to save it. In sum, the more the statute differs from copyright, the more likely it is to be constitutional.

This is not to say that only an unfair competition model would pass constitutional muster. While an unfair competition statute seems most clearly to avoid Copyright Clause problems, it is possible that a new but sufficiently distinct form of property right could also fall within Congressional Commerce Clause power.

2. First Amendment

The First Amendment must also be kept in mind in considering any new database protection legislation. To the extent that the legislation restricts the communication of facts, it might implicate First Amendment values.

Because copyright restricts the use of expression, it also has the potential to raise First Amendment problems. The courts have held, however, that copyright law accommodates First Amendment values through the idea/expression dichotomy and the fair use doctrine.[282]

Depending on the model chosen and the formulation adopted for any database legislation, it might be advisable to include an explicit statutory provision clarifying that individual facts are

---

[282] *See* Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 560 (1985).

not protected.[283] If individual facts remain free to be used for purposes of expression, whether political, artistic or other, there may be little need from a First Amendment perspective to copy a substantial portion of an entire database. To the extent that making a statement requires the use of more than a few facts, the form of protection and the nature and scope of the statutory exceptions would be highly relevant.

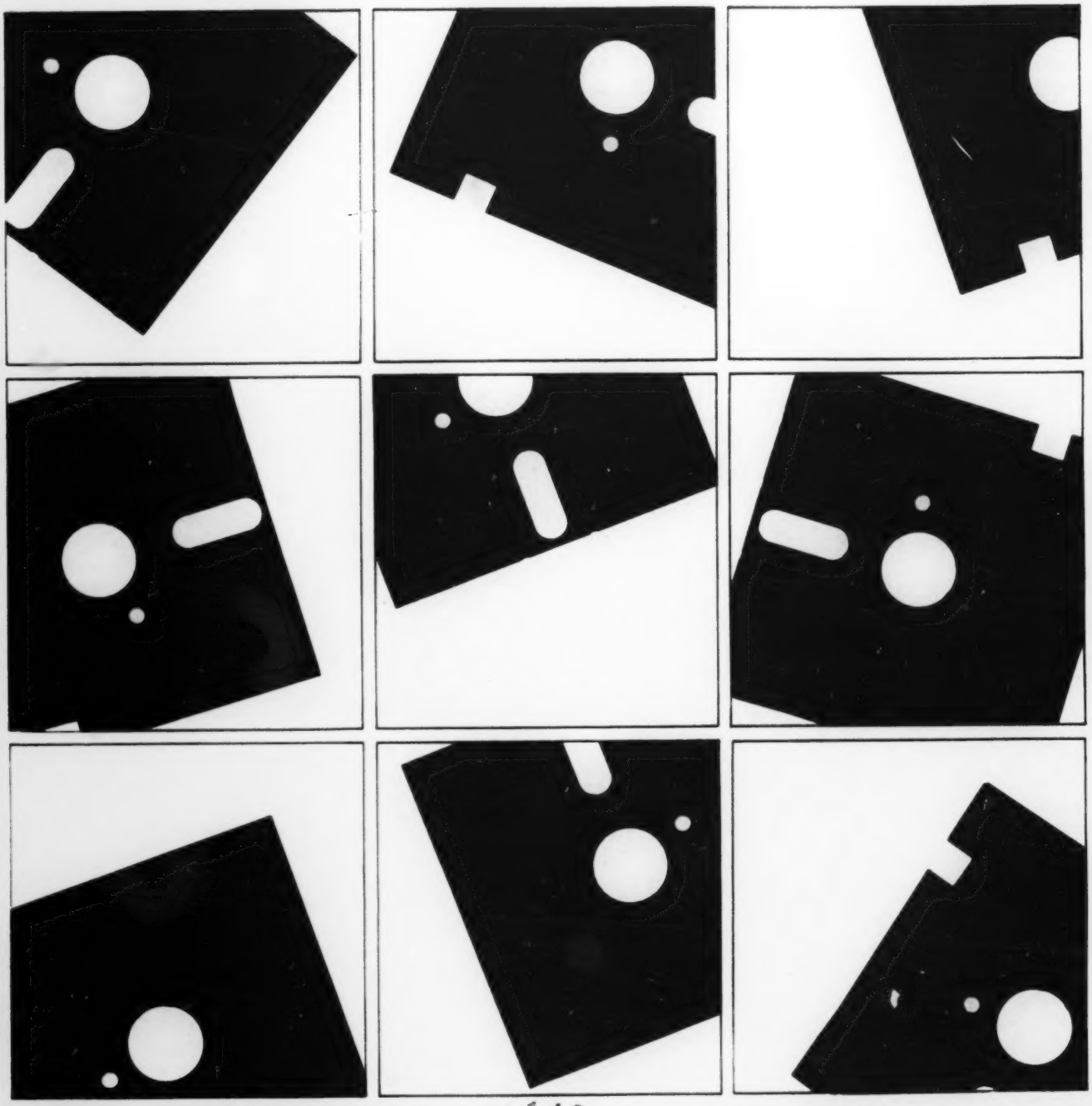
[283] *Cf.* 17 U.S.C. § 102(b).

APPENDIX A

Circular

65

Copyright Registration for Automated Databases



BEST COPY AVAILABLE

Copyright Registration for Automated Databases

DEFINITION

An automated database is a body of facts, data, or other information assembled into an organized format suitable for use in a computer and comprising one or more files.

The copyright law does not specifically enumerate databases as copyrightable subject matter but the legislative history indicates that Congress considered computer databases and compilations of data as "literary works" subject to copyright protection. Databases may be considered copyrightable as a form of compilation, which is defined in the law as a work "formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship."

EXTENT OF COPYRIGHT PROTECTION

Copyright protection extends to the compilation of facts if the compilation represents original authorship. In some instances some or all of the contents of a database, new or revised, may also be copyrightable, as in the case of a full-text bibliographic database.

Copyright protection is not available for:

- ideas, methods, systems, concepts, and layouts;
- individual words and short phrases, individual unadorned facts; and
- the selection and ordering of data in a database where the collection and arrangement of the material is a mechanical task only, and represents no original authorship; e.g., merely transferring data from hard copy to computer storage.

COPYRIGHT REGISTRATION

Copyright registration is a legal formality intended to make a public record of the basic facts of a particular copyright. In general, registration is not a condition of copyright protection. However, the copyright law encourages registration by providing certain incentives to register. For more information see Circular 1.

WHAT CONSTITUTES PUBLICATION OF A DATABASE?

The copyright law defines publication as "the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending. The offering to distribute copies or phonorecords to a group of persons for purposes of further distribution, public performance, or public display, constitutes publication." It is unclear whether on-line availability with or without printers for the user constitutes publication of the work under the copyright law. The Copyright Office does not determine whether a particular database is published or not. Instead, that decision is made by the copyright owner.

REGISTRATION FOR AUTOMATED DATABASES

Using a single application, deposit, and filing fee, automated databases may be registered in either of two ways:

(1) As a single basic registration covering the database as published on a given date or, if unpublished, as created on a given date; or

(2) As a group registration for a database with its updates or revisions (or for only its updates/revisions) added over a period of time, whether or not they are published, but only if certain conditions are met. (See Section titled "Group Registration for Automated Database Updates/ Revisions" on page 5.)

1. Single Basic Registration

For a **published** database, a single basic registration ordinarily is made for the initial database as first published on a given date. For infrequent updates that are all added to the database and published on a single date (e. g., quarterly updates published on one day), a single basic registration is appropriate.

For an **unpublished** database created over a period of **more** than one day and not yet containing any updates, a single basic registration is appropriate. Similarly, when a previously completed database is later revised or updated on a single date (e.g., quarterly updates all added on one day), a basic registration is appropriate.

2. Group Registration

A group registration must include updates or revisions, either alone or combined with the initial database.

For a **published** database, it is possible to make a group registration for only the updates/revisions published over a period of up to 3 months, regardless of whether a prior registration for the initial database was ever made. It is also possible for the first registration to be a group registration for the initial database as first published plus its updates/revisions, but only if all the material was published within the same 3-month period within the same calendar year.

An **unpublished** updated database may be registered under the group registration provisions if its updates were created over a span of more than one day.

BASIC REGISTRATION (NONGROUP)

Scope of Claim

Registration for a **published** database extends only to the material first published as a unit, i.e., that which is published on the date given in the application as the "date of publication." Registration for an **unpublished** database extends to the database as it exists at the time it is submitted for registration.

What to Send

- A completed Form TX
- A $20.00[1] nonrefundable filing fee payable to the Register of Copyrights
- Appropriate deposit (See below.)

Completing Form TX

Complete all applicable spaces on the form, and please note the following information when completing spaces 2, 3, and 6.

Basis of Claim

Where all of the material in a database has been previously published, previously registered, or is in the public domain, the claim must be limited to "compilation" assuming the requisites of original selection, coordination, or arrangement are present. Where all, or a substantial portion, of the material in the database represents copyrightable expression and it is being published or registered for the first time, the claim could also extend to "text," "revised text," "additional text," or the like.

Space 2. In the "nature of authorship" space identify the copyrightable authorship in the database for which registration is sought, for example "compilation" or "compilation and text." (Do not include any reference to design, physical form, features, hardware, or other uncopyrightable elements.)

Space 3. The **date of creation** space must be completed. Indicate the year in which the author completed the particular version for which registration is now sought, even if other versions exist or if further changes or additions are planned. The **publication** space should be completed only if the database has been published.

Space 6. Complete this space if the database contains a substantial amount of previously published, previously registered, or public domain material. Leave space 6 blank if the material contained in the database is entirely new and has never before been registered or published.

EXAMPLES: For a database containing only previously published information, space 6 could be completed as follows:

Space 6a: "previously published material"
Space 6b: "compilation of database material"

For a database containing both previously published and new original textual material, space 6 could be completed as follows:

Space 6a: "previously published text"
Space 6b: "compilation of database material and some new text"

For a previously registered database that is revised or updated, space 6 could be completed as follows:

Space 6a: "previously registered database"
Space 6b: "revised compilation"
Or, if there is also copyrightable new or revised text, space 6b could read: "Revised compilation; some new text" (or "some revised text").

[1]The Copyright Office has the authority to adjust fees at 5-year intervals, based on changes in the Consumer Price Index. The next adjustment is due in 1995. Please contact the Copyright Office after July 1995 to determine the actual fee schedule.

Deposit Requirements—General

For databases fixed and/or published only in machine-readable copies (other than CD-ROM format), the deposit requirements are the same for published and unpublished databases except that if the database is published, the deposit should also include a representation of or the page containing the copyright notice, if any.

The deposit for published and unpublished databases should consist of one copy of identifying portions of the work reproduced in a form visually perceptible without the aid of a machine or device, either on paper or in microform.

For automated databases fixed or published in a CD-ROM format, the deposit must consist of one complete copy of the entire CD-ROM package, including a complete copy of any accompanying operating software and instructional manual, and a printed version of the work embodied in the CD-ROM if the work is fixed in print as well as a CD-ROM. See 37 CFR 202.20(c)(2)(xvii) or contact the Copyright Office at (202) 707-3000 for further information.

Specific Deposit Requirements

Single-file Database (data records pertaining to a single common subject matter):

- First and last 25 pages or, under a grant of special relief, first and last 25 data records. (See "Special Relief and Trade Secrets" below for procedure to use in requesting special relief.)

✱ ***Multiple-file Database*** (separate and distinct groups of data records):

- 50 data records from each file, or the entire file, whichever is less; or
- 50 pages or data records total under a grant of special relief. (See "Special Relief and Trade Secrets" below for procedure to use in requesting special relief.)

✱ ***Revised Database*** (single or multiple-file):

- 50 pages or records showing the revisions, or the entire revised portions if less than 50 pages.

✱ **NOTE:** For multiple-file databases (new or revised), the deposit must also include a **descriptive statement** containing: title of the database; name and address of copyright claimant; name and content of each separate file within the database, including subject matter, origin of data and number of separate records within each file. For published multiple-file databases, also include a description of the exact contents of any machine-readable copyright notice used in or with the database (plus manner and frequency of display); and sample of any visually perceptible copyright notice affixed to the copies or container.

Special Deposit for Encoded Databases

Database deposits should be humanly intelligible, preferably printouts written in a natural language. If the deposit is encoded, it should include a key or explanation of the code so that a copyright examiner can determine the presence of copyrightable material.

Special Relief and Trade Secrets

When an applicant is unable to deposit the appropriate material or when a database contains trade secrets that the applicant is unwilling to disclose through deposit for registration, the Copyright Office is willing to consider special relief requests, permitting the deposit of less than or other than the required deposit. Special relief requests are granted or denied by the Chief, Examining Division, upon receipt of the applicant's written request, setting forth specific reasons why the request should be granted and indicating what deposit the applicant is able to make.

GROUP REGISTRATION FOR AUTOMATED DATABASE UPDATES/REVISIONS

Group registration is possible **only if ALL of the following conditions are met:**

1. All of the updates or revisions must be fixed (if unpublished) or published **only** in machine-readable copy(ies).
2. All of the updates or revisions were created (if unpublished) or were first published within a 3-month period, all within the same calendar year.
3. All of the updates or revisions are owned by the same copyright claimant.
4. All of the updates or revisions have the same general title.
5. All of the updates or revisions are similar in their general content, including their subject.
6. All of the updates or revisions are similar in their organization.
7. The updates or revisions, if published before March 1,1989, bear a copyright notice naming the owner of the copyright, and that name is the same in each notice.

Scope of Claim

Group registration for database updates/revisions or for a database plus its updates/revisions extends to all of the material that was created (if unpublished) or that was first published within the time period (up to 3 months) specified at space 1 of the application.

How to Register

To make a single group registration for an automated database and/or its copyrightable updates/revisions added during a given 3-month period, send the following three items together in the same envelope or package addressed to **Register of Copyrights, Library of Congress, Washington, D.C. 20559:**

- A $20.00[1] nonrefundable filing fee payable to Register of Copyrights;
- A deposit representative of the updates/revisions being registered;
- A Form TX completed according to the instructions below.

Deposit Requirements for Group Registration

The deposit requirements, **whether single or multiple file**, consist of the following:

1. **Visually perceptible identifying material** comprised of:

- 50 pages or records (whichever is less) marked to disclose copyrightable revisions/updates from one representative publication date (if published) or one representative creation date (if unpublished);**

OR

- 50 pages or records (whichever is less) comprised entirely of revisions/updates from one representative publication date (if published) or one representative creation date (if unpublished); please confirm in a cover letter that the entire unmarked deposit represents revisions/updates added to the database on the representative date;

AND

2. **Descriptive Statement:** a brief, typed or printed statement giving the following information:

- the **title** of the database;
- the name and address of the copyright **claimant;**
- for **each separate file in a multiple-file database,** its **name** and **content,** including **its subject, origin(s) of the data,** and **approximate number of data records it** contains;
- information about the **nature, location, and frequency of the** changes within the database or (for multiple-file databases) within the separate data files; and

** **NOTE**: It is not necessary to identify ALL revisions/updates. The requirement is to identify sufficient revisions/updates to establish that the work submitted for registration is an original work of authorship.

- information about the **copyright notice**, if one is used, as follows:

For a ***machine-readable notice***, transcribe the contents of the notice and indicate the manner and frequency with which it is displayed (e.g., at user's terminal only at sign on, or continuously on terminal display, or on printouts, etc.).

For a ***visually perceptible notice*** on any copies of the work (or on tape reels or containers for same), include a photocopy or other sample of the notice.

How to Complete Form TX
for Group Registration of Database Updates
(Supersedes existing instructions for Spaces 1, 3, and 6 of Form TX; complete all other applicable spaces on Form TX according to the instructions on the form.)

Space 1: Title

At the **"Title of this Work"** line, use the following statement: ***Group registration for automated database titled _____; published/unpublished (choose one) updates from _____ to***

- Indicate published or unpublished. All of the updates or revisions being registered as a group must be either published or unpublished.
- Give the earliest and latest dates for updates included in this group registration. This time period must be 3 months or less, all within the same calendar year.

Use the **"Publication as a Contribution"** line of space 1 to give the following information: Give the **date** (month, day, year) that is **represented by the marked** portions of **identifying material deposited.** Indicate the **frequency with which revisions** are made: e.g., daily, weekly, monthly, or other (specify).

Space 3 Creation and Publication

Date of Creation: Give the year in which the author completed this group of updates or revisions.

Cr ation: Under the statute, a work is "created" when it is fixed in a copy or phonorecord for the first time. Where a work has been prepared over a period of time, the part of the work existing in fixed form on a particular date constitutes the created work on that date. The date you give here should be the year in which the author completed the particular version for which registration is now being sought, even if other versions exist or if further changes or additions are planned.

Date of Publication: Give the date (month, day, year) and nation of publication only if the updates or revisions have been published. The date you give should be the last date on which you published updates or revisions during the time period specified at space 1.

Space 6: Derivative Work or Compilation

Leave space 6 blank if the material contained in the version of the database or its updates now being registered is entirely new and never before registered or published.

Complete this space if the updates or the database and its updates that are now being registered contain a substantial amount of previously published, previously registered, or public domain material.

Preexisting Material (space 6a): For a new database that has not been previously registered or previously published but that contains an appreciable amount of previously published, previously registered, or public domain material, space 6a should describe such material as "previously published material," "public domain data," or the like.

For a previously published or previously registered database that has been revised or periodically updated, space 6a should describe the preexisting material as "previously published database" or "previously registered database" or "database prior to (earliest date represented in the present group of updates)".

Material Added to This Work (space 6b): This space should describe the updates or revisions or new compilation being registered for the first time **and** should specify the frequency of these updates or revisions, e.g., "Weekly updates," or "daily revisions," or "revised compilation updated monthly." Where all or a portion of the text represents new copyrightable expression, and it is being published or registered for the first time, the statement should also include "new text," "updated and revised text," or the like. Space 2 should name the author(s) of the material listed at space 6b and should describe the nature of authorship to agree with space 6b.

NOTICE OF COPYRIGHT

For works first published on or after March 1, 1989, use of the copyright notice is optional, though highly recommended. Before March 1, 1989, use of the notice was mandatory on all published works, and any work first published before that date **must** bear a notice or risk loss of copyright protection.

(The Copyright Office does not take a position on whether works first published with notice before March 1, 1989, and reprinted and distributed on and after March 1, 1989, must bear the copyright notice.)

Use of the notice is recommended because it informs the public that the work is protected by copyright, identifies the copyright owner, and shows the year of first publication. Furthermore, in the event that a work is infringed, if the work carries a proper notice, the court will not allow a defendant to claim "innocent infringement," that is, that he or she did not realize that the work was protected. (A successful innocent infringement claim may result in a reduction in damages that the copyright owner would otherwise receive.)

The use of the copyright notice is the responsibility of the copyright owner and does not require permission from, or registration with, the Copyright Office.

POINTS TO REMEMBER

A copyright registration is effective on the date of receipt in the Copyright Office of all the required elements in acceptable form, regardless of the length of time it takes to process the application and mail the certificate of registration. The length of time required by the Copyright Office to process an application varies, depending on the amount of material received and the personnel available to handle it. It must also be kept in mind that it may take a number of days for mailed material to reach the Copyright Office and for the certificate of registration to reach the recipient.

You will not receive an acknowledgement that your application for copyright registration has been received (the Office receives more than 650,000 applications annually), but you may expect:

- A letter or telephone call from a copyright examiner if further information is needed;
- A certificate of registration to indicate the work has been registered, or if the application cannot be accepted, a letter explaining why it has been rejected.

You may not receive either of these until 120 days have passed.

If you want to know when the Copyright Office receives your material, send it by registered or certified mail and request a return receipt.

FOR MORE INFORMATION

If you have questions and wish to talk to an information specialist, call 202-707-3000. To order forms, write to the Publications Section, LM-455, Copyright Office, Library of Congress, Washington, D.C. 20559 or call 202-707-9100, the Forms and Publications Hotline.

Library of Congress • Copyright Office • 101 Independence Avenue, S.E., Washington, D.C. 20559-6000
http://www.loc.gov/copyright

▲■ November 1992—30,000

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-342-582/60,023

APPENDIX B

DIRECTIVE 96/9/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 11 March 1996

on the legal protection of databases

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 57 (2), 66 and 100a thereof,

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the Economic and Social Committee (2),

Acting in accordance with the procedure laid down in Article 189b of the Treaty (3),

(1) Whereas databases are at present not sufficiently protected in all Member States by existing legislation; whereas such protection, where it exists, has different attributes;

(2) Whereas such differences in the legal protection of databases offered by the legislation of the Member States have direct negative effects on the functioning of the internal market as regards databases and in particular on the freedom of natural and legal persons to provide on-line database goods and services on the basis of harmonized legal arrangements throughout the Community; whereas such differences could well become more pronounced as Member States introduce new legislation in this field, which is now taking on an increasingly international dimension;

(3) Whereas existing differences distorting the functioning of the internal market need to be removed and new ones prevented from arising, while differences not adversely affecting the functioning of the internal market or the development of an information market within the Community need not be removed or prevented from arising;

(4) Whereas copyright protection for databases exists in varying forms in the Member States according to legislation or case-law, and whereas, if differences in legislation in the scope and conditions of protection remain between the Member States, such unharmonized intellectual property rights can have the effect of preventing the free movement of goods or services within the Community;

(5) Whereas copyright remains an appropriate form of exclusive right for authors who have created databases;

(6) Whereas, nevertheless, in the absence of a harmonized system of unfair-competition legislation or of case-law, other measures are required in addition to prevent the unauthorized extraction and/or re-utilization of the contents of a database;

(7) Whereas the making of databases requires the investment of considerable human, technical and financial resources while such databases can be copied or accessed at a fraction of the cost needed to design them independently;

(8) Whereas the unauthorized extraction and/or re-utilization of the contents of a database constitute acts which can have serious economic and technical consequences;

(9) Whereas databases are a vital tool in the development of an information market within the Community; whereas this tool will also be of use in many other fields;

(10) Whereas the exponential growth, in the Community and worldwide, in the amount of information generated and processed annually in all sectors of commerce and industry calls for investment in all the Member States in advanced information processing systems;

(11) Whereas there is at present a very great imbalance in the level of investment in the database sector both as between the Member States and between the Community and the world's largest database-producing third countries;

(12) Whereas such an investment in modern information storage and processing systems will not take place within the Community unless a stable and uniform legal protection regime is introduced for the protection of the rights of makers of databases;

(1) OJ No C 156, 23. 6. 1992, p. 4 and OJ No C 308, 15. 11. 1993, p. 1.
(2) OJ No C 19, 25. 1. 1993, p. 3.
(3) Opinion of the European Parliament of 23 June 1993 (OJ No C 194, 19. 7. 1993, p. 144), Common Position of the Council of 10 July 1995 (OJ No C 288, 30. 10. 1995, p. 14), Decision of the European Parliament of 14 December 1995 (OJ No C 17, 22 1. 1996) and Council Decision of 26 February 1996.

BEST COPY AVAILABLE

(13) Whereas this Directive protects collections, sometimes called 'compilations', of works, data or other materials which are arranged, stored and accessed by means which include electronic, electromagnetic or electro-optical processes or analogous processes;

(14) Whereas protection under this Directive should be extended to cover non-electronic databases;

(15) Whereas the criteria used to determine whether a database should be protected by copyright should be defined to the fact that the selection or the arrangement of the contents of the database is the author's own intellectual creation; whereas such protection should cover the structure of the database;

(16) Whereas no criterion other than originality in the sense of the author's intellectual creation should be applied to determine the eligibility of the database for copyright protection, and in particular no aesthetic or qualitative criteria should be applied;

(17) Whereas the term 'database' should be understood to include literary, artistic, musical or other collections of works or collections of other material such as texts, sound, images, numbers, facts, and data; whereas it should cover collections of independent works, data or other materials which are systematically or methodically arranged and can be individually accessed; whereas this means that a recording or an audiovisual, cinematographic, literary or musical work as such does not fall within the scope of this Directive;

(18) Whereas this Directive is without prejudice to the freedom of authors to decide whether, or in what manner, they will allow their works to be included in a database, in particular whether or not the authorization given is exclusive; whereas the protection of databases by the *sui generis* right is without prejudice to existing rights over their contents, and whereas in particular where an author or the holder of a related right permits some of his works or subject matter to be included in a database pursuant to a non-exclusive agreement, a third party may make use of those works or subject matter subject to the required consent of the author or of the holder of the related right without the *sui generis* right of the maker of the database being invoked to prevent him doing so, on condition that those works or subject matter are neither extracted from the database nor re-utilized on the basis thereof;

(19) Whereas, as a rule, the compilation of several recordings of musical performances on a CD does not come within the scope of this Directive, both because, as a compilation, it does not meet the conditions for copyright protection and because it does not represent a substantial enough investment to be eligible under the *sui generis* right;

(20) Whereas protection under this Directive may also apply to the materials necessary for the operation or consultation of certain databases such as thesaurus and indexation systems;

(21) Whereas the protection provided for in this Directive relates to databases in which works, data or other materials have been arranged systematically or methodically; whereas it is not necessary for those materials to have been physically stored in an organized manner;

(22) Whereas electronic databases within the meaning of this Directive may also include devices such as CD-ROM and CD-i;

(23) Whereas the term 'database' should not be taken to extend to computer programs used in the making or operation of a database, which are protected by Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs (1);

(24) Whereas the rental and lending of databases in the field of copyright and related rights are governed exclusively by Council Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (2);

(25) Whereas the term of copyright is already governed by Council Directive 93/98/EEC of 29 October 1993 harmonizing the term of protection of copyright and certain related rights (3);

(26) Whereas works protected by copyright and subject matter protected by related rights, which are incorporated into a database, remain nevertheless protected by the respective exclusive rights and may not be incorporated into, or extracted from, the database without the permission of the rightholder or his successors in title;

(27) Whereas copyright in such works and related rights in subject matter thus incorporated into a database

(1) OJ No L 122, 17. 5. 1991, p. 42. Directive as last amended by Directive 93/98/EEC (OJ No L 290, 24. 11. 1993, p. 9.)
(2) OJ No L 346, 27. 11. 1992, p. 61.
(3) OJ No L 290, 24. 11. 1993, p. 9.

BEST COPY AVAILABLE

are in no way affected by the existence of a separate right in the selection or arrangement of these works and subject matter in a database;

(28) Whereas the moral rights of the natural person who created the database belong to the author and should be exercised according to the legislation of the Member States and the provisions of the Berne Convention for the Protection of Literary and Artistic Works; whereas such moral rights remain outside the scope of this Directive;

(29) Whereas the arrangements applicable to databases created by employees are left to the discretion of the Member States; whereas, therefore nothing in this Directive prevents Member States from stipulating in their legislation that where a database is created by an employee in the execution of his duties or following the instructions given by his employer, the employer exclusively shall be entitled to exercise all economic rights in the database so created, unless otherwise provided by contract;

(30) Whereas the author's exclusive rights should include the right to determine the way in which his work is exploited and by whom, and in particular to control the distribution of his work to unauthorized persons;

(31) Whereas the copyright protection of databases includes making databases available by means other than the distribution of copies;

(32) Whereas Member States are required to ensure that their national provisions are at least materially equivalent in the case of such acts subject to restrictions as are provided for by this Directive;

(33) Whereas the question of exhaustion of the right of distribution does not arise in the case of on-line databases, which come within the field of provision of services; whereas this also applies with regard to a material copy of such a database made by the user of such a service with the consent of the rightholder; whereas, unlike CD-ROM or CD-i, where the intellectual property is incorporated in a material medium, namely an item of goods, every on-line service is in fact an act which will have to be subject to authorization where the copyright so provides;

(34) Whereas, nevertheless, once the rightholder has chosen to make available a copy of the database to a user, whether by an on-line service or by other means of distribution, that lawful user must be able to access and use the database for the purposes and in the way set out in the agreement with the rightholder, even if such access and use necessitate performance of otherwise restricted acts;

(35) Whereas a list should be drawn up of exceptions to restricted acts, taking into account the fact that copyright as covered by this Directive applies only to the selection or arrangements of the contents of a database; whereas Member States should be given the option of providing for such exceptions in certain cases; whereas, however, this option should be exercised in accordance with the Berne Convention and to the extent that the exceptions relate to the structure of the database; whereas a distinction should be drawn between exceptions for private use and exceptions for reproduction for private purposes, which concerns provisions under national legislation of some Member States on levies on blank media or recording equipment;

(36) Whereas the term 'scientific research' within the meaning of this Directive covers both the natural sciences and the human sciences;

(37) Whereas Article 10 (1) of the Berne Convention is not affected by this Directive;

(38) Whereas the increasing use of digital recording technology exposes the database maker to the risk that the contents of his database may be copied and rearranged electronically, without his authorization, to produce a database of identical content which, however, does not infringe any copyright in the arrangement of his database;

(39) Whereas, in addition to aiming to protect the copyright in the original selection or arrangement of the contents of a database, this Directive seeks to safeguard the position of makers of databases against misappropriation of the results of the financial and professional investment made in obtaining and collection the contents by protecting the whole or substantial parts of a database against certain acts by a user or competitor;

(40) Whereas the object of this *sui generis* right is to ensure protection of any investment in obtaining, verifying or presenting the contents of a database for the limited duration of the right; whereas such investment may consist in the deployment of financial resources and/or the expending of time, effort and energy;

BEST COPY AVAILABLE

(41) Whereas the objective of the *sui generis* right is to give the maker of a database the option of preventing the unauthorized extraction and/or re-utilization of all or a substantial part of the contents of that database; whereas the maker of a database is the person who takes the initiative and the risk of investing; whereas this excludes subcontractors in particular from the definition of maker;

(42) Whereas the special right to prevent unauthorized extraction and/or re-utilization relates to acts by the user which go beyond his legitimate rights and thereby harm the investment; whereas the right to prohibit extraction and/or re-utilization of all or a substantial part of the contents relates not only to the manufacture of a parasitical competing product but also to any user who, through his acts, causes significant detriment, evaluated qualitatively or quantitatively, to the investment;

(43) Whereas, in the case of on-line transmission, the right to prohibit re-utilization is not exhausted either as regards the database or as regards a material copy of the database or of part thereof made by the addressee of the transmission with the consent of the rightholder;

(44) Whereas, when on-screen display of the contents of a database necessitates the permanent or temporary transfer of all or a substantial part of such contents to another medium, that act should be subject to authorization by the rightholder;

(45) Whereas the right to prevent unauthorized extraction and/or re-utilization does not in any way constitute an extension of copyright protection to mere facts or data;

(46) Whereas the existence of a right to prevent the unauthorized extraction and/or re-utilization of the whole or a substantial part of works, data or materials from a database should not give rise to the creation of a new right in the works, data or materials themselves;

(47) Whereas, in the interests of competition between suppliers of information products and services, protection by the *sui generis* right must not be afforded in such a way as to facilitate abuses of a dominant position, in particular as regards the creation and distribution of new products and services which have an intellectual, documentary, technical, economic or commercial added value; whereas, therefore, the provisions of this Directive are without prejudice to the application of Community or national competition rules;

(48) Whereas the objective of this Directive, which is to afford an appropriate and uniform level of protection of databases as a means to secure the remuneration of the maker of the database, is different from the aim of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data [1], which is to guarantee free circulation of personal data on the basis of harmonized rules designed to protect fundamental rights, notably the right to privacy which is recognized in Article 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms; whereas the provisions of this Directive are without prejudice to data protection legislation;

(49) Whereas, notwithstanding the right to prevent extraction and/or re-utilization of all or a substantial part of a database, it should be laid down that the maker of a database or rightholder may not prevent a lawful user of the database from extracting and re-utilizing insubstantial parts; whereas, however, that user may not unreasonably prejudice either the legitimate interests of the holder of the *sui generis* right or the holder of copyright or a related right in respect of the works or subject matter contained in the database;

(50) Whereas the Member States should be given the option of providing for exceptions to the right to prevent the unauthorized extraction and/or re-utilization of a substantial part of the contents of a database in the case of extraction for private purposes, for the purposes of illustration for teaching or scientific research, or where extraction and/or re-utilization are/is carried out in the interests of public security or for the purposes of an administrative or judicial procedure; whereas such operations must not prejudice the exclusive rights of the maker to exploit the database and their purpose must not be commercial;

(51) Whereas the Member States, where they avail themselves of the option to permit a lawful user of a database to extract a substantial part of the contents for the purposes of illustration for teaching or scientific research, may limit that permission to certain categories of teaching or scientific research institution;

[1] OJ No L 281, 23. 11. 1995, p. 31.

BEST COPY AVAILABLE

(52) Whereas those Member States which have specific rules providing for a right comparable to the *sui generis* right provided for in this Directive should be permitted to retain, as far as the new right is concerned, the exceptions traditionally specified by such rules;

(53) Whereas the burden of proof regarding the date of completion of the making of a database lies with the maker of the database;

(54) Whereas the burden of proof that the criteria exist for concluding that a substantial modification of the contents of a database is to be regarded as a substantial new investment lies with the maker of the database resulting from such investment;

(55) Whereas a substantial new investment involving a new term of protection may include a substantial verification of the contents of the database;

(56) Whereas the right to prevent unauthorized extraction and/or re-utilization in respect of a database should apply to databases whose makers are nationals or habitual residents of third countries or to those produced by legal persons not established in a Member State, within the meaning of the Treaty, only if such third countries offer comparable protection to databases produced by nationals of a Member State or persons who have their habitual residence in the territory of the Community;

(57) Whereas, in addition to remedies provided under the legislation of the Member States for infringements of copyright or other rights, Member States should provide for appropriate remedies against unauthorized extraction and/or re-utilization of the contents of a database;

(58) Whereas, in addition to the protection given under this Directive to the structure of the database by copyright, and to its contents against unauthorized extraction and/or re-utilization under the *sui generis* right, other legal provisions in the Member States relevant to the supply of database goods and services continue to apply;

(59) Whereas this Directive is without prejudice to the application to databases composed of audiovisual works of any rules recognized by a Member State's legislation concerning the broadcasting of audiovisual programmes;

(60) Whereas some Member States currently protect under copyright arrangements databases which do not meet the criteria for eligibility for copyright protection laid down in this Directive; whereas, even if the databases concerned are eligible for protection under the right laid down in this Directive to prevent unauthorized extraction and/or re-utilization of their contents, the term of protection under that right is considerably shorter than that which they enjoy under the national arrangements currently in force; whereas harmonization of the criteria for determining whether a database is to be protected by copyright may not have the effect of reducing the term of protection currently enjoyed by the rightholders concerned; whereas a derogation should be laid down to that effect; whereas the effects of such derogation must be confined to the territories of the Member States concerned,

HAVE ADOPTED THIS DIRECTIVE:

CHAPTER I

SCOPE

Article 1

Scope

1. This Directive concerns the legal protection of databases in any form.

2. For the purposes of this Directive, 'database' shall mean a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.

3. Protection under this Directive shall not apply to computer programs used in the making or operation of databases accessible by electronic means.

Article 2

Limitations on the scope

This Directive shall apply without prejudice to Community provisions relating to:

(a) the legal protection of computer programs;

(b) rental right, lending right and certain rights related to copyright in the field of intellectual property;

(c) the term of protection of copyright and certain related rights.

BEST COPY AVAILABLE

CHAPTER II

COPYRIGHT

Article 3

Object of protection

1. In accordance with this Directive, databases which, by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation shall be protected as such by copyright. No other criteria shall be applied to determine their eligibility for that protection.

2. The copyright protection of databases provided for by this Directive shall not extend to their contents and shall be without prejudice to any rights subsisting in those contents themselves.

Article 4

Database authorship

1. The author of a database shall be the natural person or group of natural persons who created the base or, where the legislation of the Member States so permits, the legal person designated as the rightholder by that legislation.

2. Where collective works are recognized by the legislation of a Member State, the economic rights shall be owned by the person holding the copyright.

3. In respect of a database created by a group of natural persons jointly, the exclusive rights shall be owned jointly.

Article 5

Restricted acts

In respect of the expression of the database which is protectable by copyright, the author of a database shall have the exclusive right to carry out or to authorize:

(a) temporary or permanent reproduction by any means and in any form, in whole or in part;

(b) translation, adaptation, arrangement and any other alteration;

(c) any form of distribution to the public of the database or of copies thereof. The first sale in the Community of a copy of the database by the rightholder or with his consent shall exhaust the right to control resale of that copy within the Community;

(d) any communication, display or performance to the public;

(e) any reproduction, distribution, communication, display or performance to the public of the results of the acts referred to in (b).

Article 6

Exceptions to restricted acts

1. The performance by the lawful user of a database or of a copy thereof of any of the acts listed in Article 5 which is necessary for the purposes of access to the contents of the databases and normal use of the contents by the lawful user shall not require the authorization of the author of the database. Where the lawful user is authorized to use only part of the database, this provision shall apply only to that part.

2. Member States shall have the option of providing for limitations on the rights set out in Article 5 in the following cases:

(a) in the case of reproduction for private purposes of a non-electronic database;

(b) where there is use for the sole purpose of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved;

(c) where there is use for the purposes of public security of for the purposes of an administrative or judicial procedure;

(d) where other exceptions to copyright which are traditionally authorized under national law are involved, without prejudice to points (a), (b) and (c).

3. In accordance with the Berne Convention for the protection of Literary and Artistic Works, this Article may not be interpreted in such a way as to allow its application to be used in a manner which unreasonably prejudices the rightholder's legitimate interests or conflicts with normal exploitation of the database.

CHAPTER III

SUI GENERIS RIGHT

Article 7

Object of protection

1. Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database.

BEST COPY AVAILABLE

2. For the purposes of this Chapter:

(a) 'extraction' shall mean the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form;

(b) 're-utilization' shall mean any form of making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by on-line or other forms of transmission. The first sale of a copy of a database within the Community by the rightholder or with his consent shall exhaust the right to control resale of that copy within the Community;

Public lending is not an act of extraction or re-utilization.

3. The right referred to in paragraph 1 may be transferred, assigned or granted under contractual licence.

4. The right provided for in paragraph 1 shall apply irrespective of the eligibility of that database for protection by copyright or by other rights. Moreover, it shall apply irrespective of eligibility of the contents of that database for protection by copyright or by other rights. Protection of databases under the right provided for in paragraph 1 shall be without prejudice to rights existing in respect of their contents.

5. The repeated and systematic extraction and/or re-utilization of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database shall not be permitted.

Article 8

Rights and obligations of lawful users

1. The maker of a database which is made available to the public in whatever manner may not prevent a lawful user of the database from extracting and/or re-utilizing insubstantial parts of its contents, evaluated qualitatively and/or quantitatively, for any purposes whatsoever. Where the lawful user is authorized to extract and/or re-utilize only part of the database, this paragraph shall apply only to that part.

2. A lawful user of a database which is made available to the public in whatever manner may not perform acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database.

3. A lawful user of a database which is made available to the public in any manner may not cause prejudice to the holder of a copyright or related right in respect of the works or subject matter contained in the database.

Article 9

Exceptions to the *sui generis* right

Member States may stipulate that lawful users of a database which is made available to the public in whatever manner may, without the authorization of its maker, extract or re-utilize a substantial part of its contents:

(a) in the case of extraction for private purposes of the contents of a non-electronic database;

(b) in the case of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved;

(c) in the case of extraction and/or re-utilization for the purposes of public security or an administrative or judicial procedure.

Article 10

Term of protection

1. The right provided for in Article 7 shall run from the date of completion of the making of the database. It shall expire fifteen years from the first of January of the year following the date of completion.

2. In the case of a database which is made available to the public in whatever manner before expiry of the period provided for in paragraph 1, the term of protection by that right shall expire fifteen years from the first of January of the year following the date when the database was first made available to the public.

3. Any substantial change, evaluated qualitatively or quantitatively, to the contents of a database, including any substantial change resulting from the accumulation of successive additions, deletions or alterations, which would result in the database being considered to be a substantial new investment, evaluated qualitatively or quantitatively, shall qualify the database resulting from that investment for its own term of protection.

Article 11

Beneficiaries of protection under the *sui generis* right

1. The right provided for in Article 7 shall apply to database whose makers or rightholders are nationals of a Member State or who have their habitual residence in the territory of the Community.

BEST COPY AVAILABLE

2. Paragraph 1 shall also apply to companies and firms formed in accordance with the law of a Member State and having their registered office, central administration or principal place of business within the Community; however, where such a company or firm has only its registered office in the territory of the Community, its operations must be genuinely linked on an ongoing basis with the economy of a Member State.

3. Agreements extending the right provided for in Article 7 to databases made in third countries and falling outside the provisions of paragraphs 1 and 2 shall be concluded by the Council acting on a proposal from the Commission. The term of any protection extended to databases by virtue of that procedure shall not exceed that available pursuant to Article 10.

CHAPTER IV

COMMON PROVISIONS

Article 12

Remedies

Member States shall provide appropriate remedies in respect of infringements of the rights provided for in this Directive.

Article 13

Continued application of other legal provisions

This Directive shall be without prejudice to provisions concerning in particular copyright, rights related to copyright or any other rights or obligations subsisting in the data, works or other materials incorporated into a database, patent rights, trade marks, design rights, the protection of national treasures, laws on restrictive practices and unfair competition, trade secrets, security, confidentiality, data protection and privacy, access to public documents, and the law of contract.

Article 14

Application over time

1. Protection pursuant to this Directive as regards copyright shall also be available in respect of databases created prior to the date referred to Article 16 (1) which on that date fulfil the requirements laid down in this Directive as regards copyright protection of databases.

2. Notwithstanding paragraph 1, where a database protected under copyright arrangements in a Member State on the date of publication of this Directive does not fulfil the eligibility criteria for copyright protection laid down in Article 3 (1), this Directive shall not result in any curtailing in that Member State of the remaining term of protection afforded under those arrangements.

3. Protection pursuant to the provisions of this Directive as regards the right provided for in Article 7 shall also be available in respect of databases the making of which was completed not more than fifteen years prior to the date referred to in Article 16 (1) and which on that date fulfil the requirements laid down in Article 7.

4. The protection provided for in paragraphs 1 and 3 shall be without prejudice to any acts concluded and rights acquired before the date referred to in those paragraphs.

5. In the case of a database the making of which was completed not more than fifteen years prior to the date referred to in Article 16 (1), the term of protection by the right provided for in Article 7 shall expire fifteen years from the first of January following that date.

Article 15

Binding nature of certain provisions

Any contractual provision contrary to Articles 6 (1) and 8 shall be null and void.

Article 16

Final provisions

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 1 January 1998.

When Member States adopt these provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the text of the provisions of domestic law which they adopt in the field governed by this Directive.

3. Not later than at the end of the third year after the date refered to in paragraph 1, and every three years thereafter, the Commission shall submit to the European Parliament, the Council and the Economic and Social Committee a report on the application of this Directive, in which, *inter alia*, on the basis of specific information supplied by the Member States, it shall examine in particular the application of the *sui generis* right, including Articles 8 and 9, and shall verify especially whether the application of this right has led to abuse of a dominant position or other interference with free competition which would justify appropriate measures being taken, including the establishment of non-voluntary licensing arrangements. Where necessary, it shall submit proposals for adjustment of this Directive in line with developments in the area of databases.

BEST COPY AVAILABLE

Article 17

This Directive is addressed to the Member States.

Done at Strasbourg, 11 March 1996.

For the European Parliament	*For the Council*
The President	*The President*
K. HÄNSCH	L. DINI

APPENDIX C

WIPO

CRNR/DC/6
ORIGINAL: English
DATE: August 30, 1996

WORLD INTELLECTUAL PROPERTY ORGANIZATION
GENEVA

DIPLOMATIC CONFERENCE ON CERTAIN COPYRIGHT AND NEIGHBORING RIGHTS QUESTIONS

Geneva, December 2 to 20, 1996

BASIC PROPOSAL FOR THE SUBSTANTIVE PROVISIONS OF THE TREATY ON INTELLECTUAL PROPERTY IN RESPECT OF DATABASES TO BE CONSIDERED BY THE DIPLOMATIC CONFERENCE

prepared by the Chairman of the Committees of Experts
on a Possible Protocol to the Berne Convention
and
on a Possible Instrument for the Protection of the Rights of Performers
and Producers of Phonograms

Memorandum prepared by the Chairman of the Committees of Experts

1. In the program of WIPO for the 1990-1991 biennium provision was made to convene a Committee of Experts to examine questions concerning a possible protocol to the Berne Convention for the Protection of Literary and Artistic Works. The Committee was convened in two sessions, the first in November 1991 and the second in February 1992. In 1992 two Committees of Experts were set up, one to continue the work started by the first Committee and the other to begin preparation of a possible new instrument for the protection of the rights of performers and producers of phonograms. The Committee of Experts on a Possible Protocol to the Berne Convention then held five further sessions, the third in June 1993, the fourth in December 1994, the fifth in September 1995, the sixth in February 1996 and the seventh in May 1996. The Committee of Experts on a Possible Instrument for the Protection of the Rights of the Performers and the Producers of Phonograms held six sessions, the first in June-July 1993, the second in November 1993, the third in December 1994, the fourth in September 1995, the fifth in February 1996 and the sixth in May 1996. The last three sessions of the two Committees (referred to subsequently as the Committees of Experts) were convened on the same dates and parts of the sessions were held jointly.

2. Until the December 1994 sessions of the Committees of Experts work was based on memoranda prepared by the International Bureau of WIPO. Following the decisions by the Committees of Experts the Director General of WIPO invited Government members and the European Commission to submit proposals for discussion at the September 1995 and February 1996 sessions.

3. In the December 1994 sessions of the Committees of Experts the Delegation of the European Commission informed the Committees about the progress of work in the European Community on a proposal for a Directive on the legal protection of databases which included a proposal for creating a *sui generis* right to be granted to the maker of a non-original database. In the September 1995 sessions the European Community and its Member States submitted to the Committees of Experts a discussion paper on "The *sui generis* right provided for in the Proposal for a Directive on the legal protection of databases" (document BCP/CE/V/5). After additional comments by the Delegation of the European Commission the Committees of Experts accepted the conclusion that the issue of such a possible *sui generis* system would be discussed further at the next sessions of the Committees on the basis of the proposals that might be made by Governments and the European Commission.

4. The European Community and its Member States submitted a proposal for the international harmonization of the *sui generis* protection of databases (document BCP/CE/VI/13) at the February 1996 sessions of the Committees of Experts. The proposal included draft provisions for the substantive clauses of a treaty. The Committees considered the proposal and several Delegations expressed positive interest in the *sui generis* right and in the continuation of work. At the same time, however, both further study and the clarification of certain concepts were requested.

5. The United States of America submitted a proposal on the *sui generis* protection of databases (document BCP/CE/VII/2-INR/CE/VI/2) in the May 1996 sessions of the Committees of Experts. The proposal included draft substantive provisions of a treaty. The Committees considered this proposal together with the previous proposal made by the European Community and its Member States (see paragraph 4). Several Delegations took the position that the question of the *sui generis* protection of databases could be submitted for

consideration by the Diplomatic Conference in December 1996. Several other Delegations held the view that further study was still necessary.

6. In their February 1996 sessions the Committees of Experts had recommended that a Diplomatic Conference for the conclusion of the appropriate treaties should be held in December 1996. A meeting of the Preparatory Committee of the Proposed Diplomatic Conference, the General Assembly of WIPO and the Assembly of the Berne Union were held in Geneva from May 20 to 24, 1996. The Preparatory Committee and the Assemblies decided that a WIPO Diplomatic Conference on Certain Copyright and Neighboring Rights Questions would be convened from December 2 to 20, 1996.

7. The Chairman of the Committees of Experts was entrusted at the February 1996 sessions with the task of preparing the draft texts ("the basic proposals") for the Diplomatic Conference; the WIPO International Bureau was to publish and circulate these draft texts by September 1, 1996, to the States, intergovernmental and non-governmental organizations to be invited to the Diplomatic Conference. The Director General of WIPO proposed that the International Bureau would prepare the draft of the final clauses of the treaty or treaties. The draft Final Clauses prepared by the Director General (document CRNR/PM/2) were examined by the Preparatory Committee of the Proposed Diplomatic Conference in May 1996.

8. In the introduction to the draft Final Clauses, the Director General of WIPO stated: "On the basis of the deliberations of the Committees of Experts, it is assumed that the aim of the Diplomatic Conference will be to adopt one or more multilateral treaty or treaties on questions of copyright, on questions of two branches (one concerning performing artists, the other concerning producers of phonograms) of neighboring rights and, perhaps, also on questions concerning a *sui generis* protection of data bases."

9. There is no decision on the number of treaties to be proposed for adoption by the Diplomatic Conference in December 1996. The Committees of Experts have made no recommendation on this issue, and after extensive discussion, the question was left open in the May 1996 meetings of the Preparatory Committee, the General Assembly of WIPO and the Assembly of the Berne Union. In this respect, the mandate given to the Chairman of the Committees of Experts was therefore open and included the possibility of establishing draft texts for one, two or three treaties.

10. Basic Proposals for the substantive provisions of three treaties are proposed by the Chairman of the Committees of Experts:

1. "Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works",
2. "Treaty for the Protection of the Rights of Performers and Producers of Phonograms".
3. "Treaty on Intellectual Property in Respect of Databases".

11. It is the assessment of the Chairman of the Committees of Experts that the expectations of the majority of Delegations participating in the meetings referred to in paragraph 9 are most closely met by proposing three draft texts. The Diplomatic Conference has the power to combine separate draft treaties into one single treaty should it find this course of action appropriate. A combined text would have several advantages, and such an option may be viewed as one of legal technique; on the other hand, a single text approach would entail

certain political and doctrinal considerations. For example, Governments contemplating ratification of or accession to such a single text would have to analyze and consider implementation of the whole contents of the combined instrument.

12. The present set of draft substantive provisions of the Basic Proposals referred to in paragraph 10, of which the present document is one, have been prepared by the Chairman of the Committees of Experts according to decisions made by the Committees at their February 1996 sessions. The Basic Proposal for the Administrative and Final Clauses of all these proposed Treaties have been submitted by the Director General of WIPO in a separate document.

13. The present document sets forth the substantive provisions of the Basic Proposal of the Treaty on Intellectual Property in Respect of Databases. There are 13 Articles preceded by a Preamble. Each provision is accompanied by explanatory Notes.

14. The purpose of the explanatory Notes is:

(i) to explain briefly the contents and rationale of the proposals and to offer guidelines for understanding and interpreting specific provisions,

(ii) to indicate the reasoning behind the proposals, and

(iii) to include references to proposals and comments made at sessions of the Committees of Experts, as well as references to models and points of comparison found in existing treaties.

15. The present Basic Proposal has been prepared on the basis of the proposals referred to paragraphs 4 and 5, taking into account discussions in the Committees of Experts. These proposals have been carefully studied, and portions of them appear in several places in the proposed Treaty, sometimes in a reformulated or combined format. Additional elements have been introduced where necessary, and not all elements of all proposals are reflected in the proposed Treaty. In some instances, alternative solutions are proposed, but the number of proposed alternatives is limited. Alternatives have been designated in the text using capital letters in accordance with Rule 29(b) of the draft Rules of Procedure for the Diplomatic Conference. One of the proposed alternative solutions includes an Annex with special provisions on enforcement.

**Draft Treaty
on Intellectual Property
in Respect of
Databases**

Contents

Preamble

[Substantive Provisions]

Article 1: Scope

Article 2: Definitions

Article 3: Rights

Article 4: Rightholders

Article 5: Exceptions

Article 6: Beneficiaries of Protection

Article 7: National Treatment and Independence of Protection

Article 8: Term of Protection

Article 9: Formalities

Article 10: Obligations concerning Technological Measures

Article 11: Application in Time

Article 12: Relation to Other Legal Provisions

Article 13: Special Provisions on Enforcement of Rights

[Administrative and Final Clauses]

ANNEX

Notes on the Title and on the Preamble

0.01 The proposed Treaty complements the existing treaties in the field of intellectual property. For this reason, the expression "intellectual property" has been included in the title of the proposed Treaty. The Treaty extends protection to databases that qualify according to the provisions of the Treaty. The expression "database" has been included in the title without further qualification.

0.02 The first paragraph of the Preamble expresses the primary objective of Contracting Parties in concluding the Treaty.

0.03 The second paragraph indicates the main reasons behind the objective stated in the first paragraph.

0.04 The third paragraph indicates the main reasons why Contracting Parties think databases ought to be protected as intellectual property.

0.05 The fourth paragraph refers to the means by which Contracting Parties seek to obtain their objective, namely to establish a new form of protection which, by enabling recovery of investments in databases, encourages investment in this field.

0.06 The fifth paragraph underlines the principle that the proposed Treaty does not interfere with other forms of intellectual property protection at the international level. Because many databases are already protected as literary or artistic works under the Berne Convention for the Protection of Literary and Artistic Works (hereinafter referred to in these Notes as "the Berne Convention"), a specific reference to the Convention has been made. The provisions of the proposed Treaty leave unaffected the protection provided under existing treaties for other intellectual property rightholders, including authors, performers, producers of phonograms, and broadcasting organizations.

[End of Notes on the Title and the Preamble]

Preamble

The Contracting Parties,

Desiring to enhance and stimulate the production, distribution and international trade in databases,

Recognizing that databases are a vital element in the development of a global information infrastructure and an essential tool for promoting economic, cultural and technological advancement,

Recognizing that the making of databases requires the investment of considerable human, technical and financial resources but that such databases can be copied or accessed at a fraction of the cost needed to design them independently,

Desiring to establish a new form of protection for databases by granting rights adequate to enable the makers of databases to recover the investment they have made in their databases and by providing international protection in a manner as effective and uniform as possible,

Emphasizing that nothing in this Treaty shall derogate from existing obligations that Contracting Parties may have to each other under treaties in the field of intellectual property, and in particular, that nothing in this Treaty shall in any way prejudice the rights granted to authors in the Berne Convention for the Protection of Literary and Artistic Works,

Have agreed as follows:

[End of Preamble]

Notes on Article 1

1.01 Article 1 sets out the scope of the proposed Treaty. It provides that Contracting Parties shall protect all databases that represent a substantial investment.

1.02 The production and distribution of databases has become a broad economic activity which is expanding rapidly worldwide. The production and distribution of databases may be viewed as a "content industry" within the information industry, and it may be expected that this industry will be a major source of employment. The development of a content industry has both direct and indirect effects on the development of the information infrastructure at a national and international level. In this connection, the database industry plays a significant role in fostering new industries and new jobs.

1.03 The production and distribution of databases requires considerable investment. At the same time, exact copies of whole databases or their essential parts can be made at practically no cost. The increasing use of digital recording technology exposes database makers to the risk that the contents of their databases may be copied and rearranged electronically, without their authorization, to produce similar competing databases or databases with identical content.

1.04 Unauthorized retrieval and copying of the contents of a database has serious consequences for the economics of database production. Protection against unauthorized copying and other unauthorized use has been sought through the copyright system. According to the prevailing view, a significant proportion of existing databases may already be protected by copyright. A condition for this protection is that a database meet the requirements for copyright protection, i.e. that it be the result of its creator's own intellectual effort and that it achieve a sufficient level of originality. It has, however, become evident that copyright does not provide sufficient protection. Many valuable databases do not qualify for copyright protection. It should be noted that in some countries specific *sui generis* forms of intellectual property protection now apply to databases or are presently being established. In some other countries, copyright seems to provide all the protection needed by databases. Nonetheless, these national or regional solutions remain insufficient. In the network environment of the global information infrastructure the database market is truly international and does not respect national boundaries.

1.05 In all countries, continued investment is an essential factor for the development and refinement of databases. Such investment will not take place unless a stable and uniform regime of legal protection is established to protect the rights of makers of databases.

1.06 The proposed Treaty seeks to safeguard makers of databases against misappropriation of the fruits of their financial and professional investment in collecting, verifying and presenting the contents of databases. It does this by proposing protection that covers the whole or substantial parts of a database against certain acts by a user or by a competitor, for the limited duration of the right. The investment, of course, may comprise financial resources, human resources or both.

1.07 On March 11, 1996, the European Parliament and the Council of the European Union adopted a Directive on the legal protection of databases (96/9/EC). This Directive harmonizes

[Article 1 starts on page 13]

certain aspects of the copyright protection provided for databases and creates an exclusive *sui generis* right for the makers of databases. The general objective of this right is to protect the investment of time, money and effort by the maker of a database, irrespective of whether the database is in itself innovative. According to the Directive, a database is protected if there has been a substantial investment, in qualitative or quantitative terms, in obtaining, verifying or presenting the contents of the database. The duration of the protection provided by the Directive is 15 years. The date by which the Member States of the European Union must implement the Directive in their national legislation is January 1, 1998. The proposal submitted by the European Community and its Member States for the February 1996 session of the Committees of Experts follows closely the substantive provisions of this Directive.

1.08 In May 1996, a bill was introduced in the United States Congress (H.R. 3531) that would amend title 15 of the United States Code to create a new federal statute for database protection. The proposed "Database Investment and Intellectual Property Antipiracy Act of 1996" is aimed at preventing actual or threatened competitive injury by the misappropriation of databases or their contents; it is not targeted at non-competitive uses. A database would be subject to protection under the Act if the collection, assembly, verification, organization or presentation of the database contents were the result of a qualitatively or quantitatively substantial investment of human, technical, financial or other resources.

1.09 An important part of the background to the United States bill was the United States Supreme Court decision in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340 (1991). The bill was introduced in the U.S. Congress with the statement that "While reaffirming that most — although not all — commercially significant databases satisfy the 'originality' requirement for protection under copyright, the Court [in *Feist*] emphasized that this protection is 'necessarily thin'. Several subsequent lower court decisions have underscored that copyright cannot stop a competitor from lifting massive amounts of factual material from a copyrighted database to use as the basis for its own competing product."

1.10 The United States bill draws on the fundamental elements of the European Directive and is parallel to its Trans-Atlantic counterpart in its most crucial points. The most significant difference between the United States bill and the European Directive is that the former proposes a 25-year term of protection. When the bill was introduced, its sponsors emphasized that the existing protection for databases afforded by copyright and contract law would not be affected. The bill is intended to supplement these legal rights, not replace them. Furthermore, it was emphasized that the bill avoids conferring any monopoly on facts. The bill is intended to be fully consistent with the proposal on *sui generis* protection of databases which was submitted by the Delegation of the United States of America for the May 1996 sessions of the Committees of Experts (document BCP/CE/VII/2-INR/CE/VI/2).

1.11 The proposed Treaty is based on the aforementioned proposals made by the European Community and its Member States and by the United States of America, taking into account discussions within the Committees of Experts. The scope of the proposed Treaty is laid down in the provisions of Article 1 in a manner that is fully consistent with these proposals.

[Article 1 starts on page 13]

1.12 Paragraph (1) identifies the protected subject matter and sets out the general condition for protection. The protected subject matter is databases. The condition for protection is that a substantial investment has been made in the formation of the database. The expressions "database" and "substantial investment" are defined in Article 2.

1.13 Paragraph (2) makes it clear that protection shall be granted to databases irrespective of the form or medium in which they are embodied. Protection extends to databases in both electronic and non-electronic form. Moreover, this wording embraces all forms or media now known or later developed. Paragraph (2) also makes it clear that protection shall be granted to databases regardless of whether they are made available to the public. This means that databases that are made generally available to the public, commercially or otherwise, as well as databases that remain within the exclusive possession and control of their developers enjoy protection on the same footing.

1.14 Paragraph (3) expresses the principle that the protection accorded by the proposed Treaty is independent of any other form of protection. The protection would therefore be of a new or independent nature. Consequently, the proposed Treaty provides cumulative protection by the attachment of different rights to the database or to its contents. It should be pointed out that the proposed new protection does not replace any of the existing forms of protection that apply to databases or their contents.

1.15 Paragraph (4) provides that protection does not extend to any computer programs as such. A computer program is a set of programming instructions that may cause a computer to perform certain functions or achieve certain results. A computer program can include collections of data or other materials that are not part of the set of instructions that form the operative core of the computer program. According to the proposed Treaty, such databases incorporated in computer programs are protected in the same way as any other databases.

[End of Notes on Article 1]

Article 1

Scope

(1) Contracting Parties shall protect any database that represents a substantial investment in the collection, assembly, verification, organization or presentation of the contents of the database.

(2) The legal protection set forth in this Treaty extends to a database regardless of the form or medium in which the database is embodied, and regardless of whether or not the database is made available to the public.

(3) The protection granted under this Treaty shall be provided irrespective of any protection provided for a database or its contents by copyright or by other rights granted by Contracting Parties in their national legislation.

(4) The protection under this Treaty shall not extend to any computer program as such, including without limitation any computer program used in the manufacture, operation or maintenance of a database.

[End of Article 1]

Notes on Article 2

2.01 Article 2 contains definitions of the key terms used in the proposed Treaty.

2.02 Item (i) defines the term "database". The term should be understood to include collections of literary, musical or audiovisual works or any other kind of works, or collections of other materials such as texts, sounds, images, numbers, facts, or data representing any other matter or substance. It is worth pointing out that in addition to many kinds of works and other information materials, databases may contain collections of expressions of folklore.

2.03 In a database, the works or other materials are systematically or methodically arranged, and each of these works or other materials can be individually accessed by electronic or other means. It is not necessary that the materials in a database be stored physically in an organized manner. The arrangement of the materials may be laid down in the addresses and indexes of the material that make it possible to directly access any of the materials in a systematic or methodical way. The requirement that the contents of a database be independent works, data or other materials, and that items in the database are individually accessible excludes any recording of an audiovisual, cinematographic, literary or musical work as such from the definition of a database and the protection of this proposed Treaty.

2.04 The term "collection" has been used in the definition of the term "database", whereas the term "compilation" is used in Article 10.2 of the Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods (hereinafter referred to in these Notes as the TRIPS Agreement) concerning copyright protection for databases. The term "collections" has been used in Article 2(5) of the Berne Convention, defining the copyright protection available for collections of works, and in Article 5 of the draft "Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works". It is not intended that the proposed Treaty make any distinction between the two terms; rather, the proposed Treaty, compared to the Berne Convention, adds certain conditions for protection and removes others.

2.05 Item (ii) defines the term "extraction" as meaning the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form. The act of extraction is the transfer of some material to another medium; the original material on the medium in which the database is embodied remains on that medium. In this sense, the term "extraction" is a synonym for "copying" or "reproduction". The expression "another medium" does not refer to any particular medium. Transfer to the same type or any other type of medium, device, instrument or contrivance capable of recording the transferred material, is a transfer within the meaning of this provision. Reference in the provision to "any means" or "any form" is meant to cover all means and forms now known or later developed.

2.06 According to item (iii), the "maker of the database" means the natural or legal person or persons with control and responsibility for the undertaking of a substantial investment in making a database. The expression "control and responsibility for the undertaking of a substantial investment" is intended to exclude the possibility that the protection of the proposed Treaty might flow to the employees who execute the tasks required to produce a database; it is clear that the rights and protection flow to their employer, be it a company,

Article 2

Definitions

For the purposes of this Treaty:

(i) "database" means a collection of independent works, data or other materials arranged in a systematic or methodical way and capable of being individually accessed by electronic or other means;

(ii) "extraction" means the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form;

(iii) "maker of the database" means the natural or legal person or persons with control and responsibility for the undertaking of a substantial investment in making a database;

[Article 2 continues]

enterprise or other organization, which makes the investment. Likewise, the definition excludes subcontractors who may be commissioned to execute such tasks. In the same way that the term "author" in the Berne Convention applies to the successors in title of the author, the term "maker of a database" applies to the successors in title of the maker of a database. The successors in title of the maker of a database enjoy the full protection of the proposed Treaty.

2.07 Item (iv) defines the term "substantial investment". The investment may be in human, financial, technical or other resources essential to the production of a database. The human resources may, in addition to the "sweat of the brow", consist of the contribution of ideas, innovation and efforts that add to the quality of the product. The protection of a database does not, however, depend upon innovation or quality; mere investment is sufficient. The fact that the main requirement for protection is investment does not, however, reduce the value of the proposed system of protection since it also encourages innovation as well as industrious efforts in the production of databases. The investment must be sufficient, or "substantial", to qualify the database for protection. The substantiality requirement has been characterized in the expression "qualitatively or quantitatively significant"; this expression should be understood to mean qualitatively, quantitatively or both together. The measurement of significance must be based on objective criteria. In any dispute, it is the burden of the maker of the database to demonstrate the necessary investment.

2.08 The activities listed in Article 1(1) that may comprise the investment are the collection, assembly, verification, organization or presentation of the contents of the database. In practice, these are the steps in the production of a database that are most likely to involve substantial investments. A substantial investment in any one of the listed activities will fulfil the requirements for protection. It is recognized that "collection" and "assembly" are often interlinked, and "organization" and "presentation" of the contents may take place simultaneously. Any subsequent verification or re-verification is considered to be "verification" in the sense of Article 1(1).

2.09 Item (v) defines the term "substantial part". The substantiality of any portion of the database is assessed against the value of the database. This assessment should evaluate the qualitative and quantitative aspects of the portion, although neither aspect is more important than the other. As noted in connection with item (iv), "qualitatively or quantitatively" must be understood to mean either or both together. The value of the database refers to its commercial value. This value consists on one hand of direct investments made in the database and on the other hand of the market value or expected market value of the database. This assessment may also take into account the diminution in market value that may result from the use of the portion, including the added risk that the investment in the database will not be recoverable. It may even include an assessment of whether a new product using the portion could serve as a commercial substitute for the original, diminishing the market for the original.

2.10 According to item (v), "substantial part" means any portion of the database, "including an accumulation of small portions". In practice, repeated or systematic use of small portions of the contents of a database may have the same effect as extraction or utilization of a large, or substantial, part of the contents of the database. This construction is intended to ensure th : effective functioning of the right and to avoid misappropriation.

[Article 2, continued]

(iv) "substantial investment" means any qualitatively or quantitatively significant investment of human, financial, technical or other resources in the collection, assembly, verification, organization or presentation of the contents of the database;

(v) "substantial part", in reference to the contents of a database, means any portion of the database, including an accumulation of small portions, that is of qualitative or quantitative significance to the value of the database;

[Article 2 continues]

2.11 In item (vi) a definition is provided for the term "utilization". Utilization is a broad concept that covers all forms of making a database or its contents available to the public. It comprises both tangible and intangible dissemination and diffusion, including the distribution of physical copies and all forms of transmission by wire or wireless means. Utilization covers the making of a database available to the public by both on-line and "local" means; it encompasses interactive on-line, on-demand operations where members of the public have access to the database at a place and at a time individually chosen by them, and it encompasses such local means as showing, "playing", demonstrating or otherwise making the contents of a database (such as a CD-ROM) perceptible to the public, even when no transmission is involved. Broadcasting and cable transmissions, whether subscription-based or not, may also be utilization of a database.

2.12 The term "public" has been used in the provision. The purpose for this is to make a distinction between relevant utilization and non-relevant communication between private parties. Utilization includes making available to the public by any means. No list of examples can be exhaustive. The expression "any means" includes all means now known or later developed. A database may be made available to the public even in the absence of any direct or indirect commercial advantage or financial gain.

[End of Notes on Article 2]

[Article 2, continued]

(vi) "utilization" means the making available to the public of all or a substantial part of the contents of a database by any means, including by the distribution of copies, by renting, or by on-line or other forms of transmission, including making the same available to the public at a place and at a time individually chosen by each member of the public.

[End of Article 2]

Notes on Article 3

3.01 Paragraph (1) contains the most important operative provision of the proposed Treaty. It accords to the maker of a database the right to authorize or prohibit the relevant acts of extraction and utilization. The right is by its nature an exclusive right. The contents of the provision have, to a great extent, already been determined by the definitions of "extraction", "substantial part" and "utilization" in Article 2.

3.02 The protection provided does not preclude any person from independently collecting, assembling or compiling works, data or materials from any source other than a protected database.

3.03 The right of utilization granted to the maker of a database covers, according to the definition of "utilization", the making available to the public of all or a substantial part of the contents of a database *inter alia* by the distribution of copies. Paragraph (2) allows Contracting Parties to provide for the exhaustion of the right of distribution on a national basis.

3.04 If it is possible for regional economic integration areas with their own legislation in this field to become parties to the Treaty the effect of the exhaustion of the right of distribution may be regional. The territories of such Contracting Parties consist of the territories of their member countries. There is thus no need to make separate mention of regional economic integration areas.

[End of Notes on Article 3]

Article 3

Rights

(1) The maker of a database eligible for protection under this Treaty shall have the right to authorize or prohibit the extraction or utilization of its contents.

(2) Contracting Parties may, in their national legislation, provide that the right of utilization provided for in paragraph (1) does not apply to distribution of the original or any copy of any database that has been sold or the ownership of which has been otherwise transferred in that Contracting Party's territory by or pursuant to authorization.

[End of Article 3]

Notes on Article 4

4.01 Paragraph (1) determines the first owner of the rights provided for in this Treaty. The expression "maker of the database" has been used in singular form in many provisions of the proposed Treaty. This expression must be understood to include its plural wherever there has been more than one maker of a database. When the rights in respect of a database belong to several makers, they own the rights jointly and the authorization of each rightholder is necessary for the extraction or utilization of a substantial part of the database. Likewise, when there is joint ownership of rights in a database, the consent of each of the rightholders is necessary for the assignment, transfer or licensing of the database.

4.02 Paragraph (2) provides that the rights established by the proposed Treaty are freely transferable. No limitations apply to this freedom of contract. National laws, of course, may impose certain requirements in connection with contracts generally, such as a requirement that they be embodied in written documents. Requirements of this type may also be imposed in connection with contracts concerning rights in databases.

4.03 A transferee of rights under paragraph (2) may enjoy all the same protection as the original maker of the database. The maker of a database may transfer all of the rights he has therein.

[End of Notes on Article 4]

Article 4

Rightholders

(1) The rights provided under this Treaty shall be owned by the maker of the database.

(2) The rights provided under this Treaty shall be freely transferable.

[End of Article 4]

Notes on Article 5

5.01 According to paragraph (1), Contracting Parties may provide, in their national legislation, exceptions to or limitations of the rights provided in this Treaty. This freedom is limited by the criteria originally introduced in Article 9(2) of the Berne Convention. First, the criteria permit exceptions only in certain special cases. Second, the exceptions may never conflict with normal exploitation of the database, and third, the exceptions may not unreasonably impair or prejudice the legitimate interests, including economic interests, of the rightholder. The provisions of paragraph (1) allow limitations on the rights of both extraction and utilization.

5.02 Paragraph (2) sets forth a specific rule permitting national legislation to determine whether and how to protect databases made by governmental entities, their agents and employees.

5.03 The rights and exceptions in the proposed Treaty are norms for minimum protection. Article 5 does not preclude national legislation that imposes stricter or narrower rules in respect of exceptions. For example, a Contracting Party may enact national legislation that excludes any limitation of the right to extract the contents of a database in electronic form for private purposes.

[End of Notes on Article 5]

Article 5

Exceptions

(1) Contracting Parties may, in their national legislation, provide exceptions to or limitations of the rights provided in this Treaty in certain special cases that do not conflict with the normal exploitation of the database and do not unreasonably prejudice the legitimate interests of the rightholder.

(2) It shall be a matter for the national legislation of Contracting Parties to determine the protection that shall be granted to databases made by governmental entities or their agents or employees.

[End of Article 5]

Notes on Article 6

6.01 According to paragraph (1), the benefit of protection is granted to nationals of Contracting Parties. According to the provisions of Article 7(4) makers of databases who have their habitual residence in a Contracting Party are assimilated to nationals of that Contracting Party.

6.02 By a reference to the provisions of paragraph (1), paragraph (2) contains a provision laying down the same principle for the benefit of companies, firms and other legal entities having certain points of attachment to a Contracting Party. The expression "companies, firms and other legal entities" is intended to cover all companies, firms, corporations, unions, associations, non-profit institutions and other legal persons.

6.03 Protection is given to the persons identified in paragraph (1) and paragraph (2) if they meet the criteria set forth in those provisions at the time of the making of the database, which is the moment when the database meets the requirements of Article 1(1).

[End of Notes on Article 6]

Article 6

Beneficiaries of Protection

(1) Each Contracting Party shall protect according to the terms of this Treaty makers of databases who are nationals of a Contracting Party.

(2) The provisions of paragraph (1) shall also apply to companies, firms and other legal entities formed in accordance with the laws of a Contracting Party or having their registered office, central administration or principal place of business within a Contracting Party; however, where such a company, firm or other legal entity has only its registered office in the territory of a Contracting Party, its operations must be genuinely linked on an on-going basis with the economy of a Contracting Party.

[End of Article 6]

Notes on Article 7

7.01 Article 7 contains rules on national treatment and independence of protection. The provisions closely follow the corresponding clauses in Article 5 of the Berne Convention. In accordance with the language in Article 6, these rules refer to the Contracting Party of which the maker of a database is a national, whereas the Berne Convention refers to the country of origin which is defined in the Convention.

7.02 It is proposed that global and unlimited national treatment shall be applied to the rights granted in the proposed Treaty. Paragraph (1) sets out the fundamental principle of national treatment, which is modelled on Article 5(1) of the Berne Convention. In addition, paragraph (1) guarantees all the rights specially granted by this Treaty in a manner similar to the aforementioned clause of the Berne Convention.

7.03 Paragraph (2) contains the rule governing protection of the maker of a database in the Contracting Party of which he is a national. Such protection shall be governed by national legislation. The provision follows the principle of the first sentence of Article 5(3) of the Berne Convention.

7.04 Paragraph (3) adds a provision on independence of protection. This provision corresponds to the language of Article 5(2) of the Berne Convention.

7.05 Paragraph (4) contains a provision according to which the criterion of habitual residence is assimilated to the criterion of nationality for the purposes of the proposed Treaty.

[End of Notes on Article 7]

Article 7

National Treatment and Independence of Protection

(1) The maker of a database shall enjoy in respect of the protection provided for in this Treaty, in Contracting Parties other than the Contracting Party of which he is a national, the rights which their respective laws do now or may hereafter grant to their nationals as well as the rights specially granted by this Treaty.

(2) Protection of a database in the Contracting Party of which the maker of the database is a national shall be governed by national legislation.

(3) The enjoyment and the exercise of rights under this Treaty shall be independent of the existence of protection in the Contracting Party of which the maker of a database is a national. Apart from the provisions of this Treaty, the extent of protection, as well as the means and extent of redress, shall be governed exclusively by the laws of the Contracting Party where protection is claimed.

(4) Makers of databases who are not nationals of a Contracting Party but who have their habitual residence in a Contracting Party shall, for the purposes of this Treaty, be assimilated to nationals of that Contracting Party.

[End of Article 7]

Notes on Article 8

8.01 The intellectual property protection provided for in the proposed Treaty is limited in duration. Provisions on the term of protection are found in Article 8. Two alternatives are offered in the Article concerning the term of protection. Alternative A follows the proposal made by the United States of America (document BCP/CE/VII/2-INR/CE/VI/2) according to which the term of protection would be at least 25 years, calculated according to Article 6 of that proposal. Alternative B is based on the term of 15 years proposed by the European Community and its Member States (document BCP/CE/VI/13).

8.02 The determination of the proper duration of any form of intellectual property protection is bound to depend on many factors, including the nature of the subject matter protected, the prevailing economic and technical circumstances and the interests of rightholders, users and society at large. In the case of databases, the need for protection in the first instance is connected to the ability of makers of databases to recover the investment they make in a database. The economic life-span of different databases varies depending on their content and the structure of the marketplace. For dynamic databases that are constantly changed and developed, a shorter term of protection could be justified. New versions may be protected under the proposed Treaty and old versions rapidly become outdated and useless. In the case of static databases, such as encyclopaedic, historical and cartographic databases, protection may be needed for a longer period of time. Indeed, the recovery of the heavy investments required by the production of such databases may justify or even necessitate a longer term of protection. For practical reasons, it would be advisable to adopt a single term of protection for all types of databases.

8.03 The 25-year and 15-year alternatives are found in paragraph (1) and paragraph (2) of Article 8. The decision on the term of protection has been left to the Diplomatic Conference.

8.04 In paragraph (1), it is proposed that the calculation of the term of protection should start from the time when the database first meets the requirements of Article 1(1). It is proposed that the term of protection laid down in the proposed Treaty would be a minimum term of protection. This is indicated by the words "at least" in the provision. As is customary in the field of copyright, it is proposed that the rights would endure for a fixed number of years starting from January 1 of the year following the date when the database first met the above-mentioned requirements.

8.05 According to the provisions of paragraph (2), the calculation of the term of protection would start from the date when the database was first made available to the public, if the database is made available to the public in any manner before the expiration of the term provided for in paragraph (1).

8.06 Paragraph (3) establishes the principle that when a database is substantially changed it becomes a new database, entitled to its own term of protection. The substantiality of the change is to be evaluated qualitatively, quantitatively or both qualitatively and quantitatively. The kinds of changes that will lead to the formation of a new database with its own term of protection are those substantial changes in the contents of the database that involve a new substantial investment. Such changes may result from an accumulation of successive acts, such as those included in the non-exhaustive list in the provision.

[End of Notes on Article 8]

Article 8

Term of Protection

(1) The rights provided for in this Treaty shall attach when a database meets the requirements of Article 1(1) and shall endure for at least

Alternative A: 25

Alternative B: 15

years from the first day of January in the year following the date when the database first met the requirements of Article 1(1).

(2) In the case of a database that is made available to the public, in whatever manner, before the expiry of the period provided for in paragraph (1), the term of protection shall endure for at least

Alternative A: 25

Alternative B: 15

years from the first day of January in the year following the date when the database was first made available to the public.

(3) Any substantial change to the database, evaluated qualitatively or quantitatively, including any substantial change resulting from the accumulation of successive additions, deletions, verifications, modifications in organization or presentation, or other alterations, which constitute a new substantial investment, shall qualify the database resulting from such investment for its own term of protection.

[End of Article 8]

Notes on Article 9

9.01 Article 9 sets forth the principle of formality-free protection. The protection provided for in the proposed Treaty may not be subject to registration, notice, marking, or any other formality.

[End of Notes on Article 9]

Article 9

Formalities

The enjoyment and exercise of the rights provided for in this Treaty shall not be subject to any formality.

[End of Article 9]

Notes on Article 10

10.01 Article 10 contains provisions on obligations concerning technological measures.

10.02 According to paragraph (1) Contracting Parties shall make unlawful the importation, manufacture or distribution of protection-defeating devices or the offer or performance or services having the same effect. A condition for proscription is that the person performing the act knows or has reasonable grounds to know that the device or service will be used for or in the course of the unauthorized exercise of any of the rights provided for under the proposed Treaty. This knowledge requirement therefore focuses on the purpose for which the device or service will be used. The expression "knowing or having reasonable grounds to know" has the same meaning as the expression "knowingly or with reasonable grounds to know" in the provisions on enforcement in the TRIPS Agreement.

10.03 Paragraph (2) includes a provision on remedies against the unlawful acts referred to in paragraph (1). The reason for a special provision on remedies is the fact that the provisions on enforcement in the TRIPS Agreement, which are applicable according to Article 14 of the proposed Treaty, only concern "any act of infringement of intellectual property rights covered by this Agreement". The obligations established in the proposed Article 10 are more akin to public law obligations directed at Contracting Parties than to provisions granting "intellectual property rights".

10.04 Contracting Parties are free to choose appropriate remedies according to their own legal traditions. The main requirement is that the remedies provided are effective and thus constitute a deterrent and a sufficient sanction against the prohibited acts.

10.05 Contracting Parties may design the exact field of application of the provisions envisaged in this Article taking into consideration the need to avoid legislation that would impede lawful practices and the lawful use of subject matter that is in the public domain. Having regard to differences in legal traditions, Contracting Parties may, in their national legislation, also define the coverage and extent of the liability for violation of the prohibition enacted according to paragraph (1).

10.06 Paragraph (3) contains the definition of a "protection-defeating device". It describes the characteristics of devices falling within the scope of the obligations under paragraph (1). To achieve the necessary coverage, the phrase "primary purpose or primary effect of which is to circumvent..." has been used rather than "specifically designed or adapted to circumvent...".

10.07 A proposal on this issue was made for the May 1996 session of the Committees of Experts by the United States of America (document BCP/CE/VII/2-INR/CE/VI/2). The ongoing international discussion has led to a number of modifications and these are incorporated in Article 10.

[End of Notes on Article 10]

Article 10

Obligations concerning Technological Measures

(1) Contracting Parties shall make unlawful the importation, manufacture or distribution of protection-defeating devices, or the offer or performance of any service having the same effect, by any person knowing or having reasonable grounds to know that the device or service will be used for, or in the course of, the exercise of rights provided under this Treaty that is not authorized by the rightholder or the law.

(2) Contracting Parties shall provide for appropriate and effective remedies against the unlawful acts referred to in paragraph (1).

(3) As used in this Article, "protection-defeating device" means any device, product or component incorporated into a device or product, the primary purpose or primary effect of which is to circumvent any process, treatment, mechanism or system that prevents or inhibits any of the acts covered by the rights under this Treaty.

[End of Article 10]

Notes on Article 11

11.01 According to Article 11, the introduction of the new form of protection provided for in the proposed Treaty adheres to a principle that is familiar from the field of copyright.

11.02 In paragraph (1), the right is introduced in such a way that all existing databases become protected from the moment of the entry into force of the proposed Treaty for each Contracting Party. The normal term of protection under Article 6 applies. A database that met the requirements of Article 1(1) before the entry into force of the proposed Treaty for a given Contracting Party, but within the term prescribed in Article 6, will be protected for the remainder of the Article 6 term. A database that met the requirements of Article 1(1) a longer time ago than the term prescribed in Article 6 will remain unprotected.

11.03 Paragraph (2) makes clear that the protection accorded by the proposed Treaty shall not be retroactive and shall not disrupt existing agreements. The protection is without prejudice to any acts performed, agreements concluded or rights acquired before the entry into force of the proposed Treaty for each Contracting Party.

11.04 Paragraph (3) allows transitional arrangements for a limited period of time. The purpose of these provisions is to protect investments made in the making copies by persons who in good faith engaged in the exploitation of databases in a situation where no protection existed. The provision makes it possible for Contracting Parties to provide for conditions under which copies made before the entry into force of the Treaty may continue to be distributed to the public after the entry into force of the Treaty. The time limit for such provisions is two years. Transitional arrangements only concern distribution of copies and do not extend to the reproduction of new copies by extraction, or to utilization of the database by making it available to the public by transmission.

[End of Notes on Article 11]

Article 11

Application in Time

(1) Contracting Parties shall also grant protection pursuant to this Treaty in respect of databases that met the requirements of Article 1(1) at the date of the entry into force of this Treaty for each Contracting Party. The duration of such protection shall be determined by the provisions of Article 8.

(2) The protection provided for in paragraph (1) shall be without prejudice to any acts concluded or rights acquired before the entry into force of this Treaty in each Contracting Party.

(3) A Contracting Party may provide for conditions under which copies of databases which were lawfully made before the date of the entry into force of this Treaty for that Contracting Party may be distributed to the public, provided that such provisions do not allow distribution for a period longer than two years from that date.

[End of Article 11]

Notes on Article 12

12.01 Article 12 deals with the relationship between the protection accorded under the proposed Treaty and existing or future rights and obligations. The protection granted under the proposed Treaty shall leave intact and shall in no way affect any "conventional" rights in the database or its contents. This principle is extended as well to any obligations that might exist with respect to the database or its contents. The Article contains a non-exhaustive list of rights and obligations.

[End of Notes on Article 12]

Article 12

Relation to Other Legal Provisions

The protection accorded under this Treaty shall be without prejudice to any other rights in, or obligations with respect to, a database or its contents, including laws in respect of copyright, rights related to copyright, patent, trademark, design rights, antitrust or competition, trade secrets, data protection and privacy, access to public documents and the law of contract.

[End of Article 12]

Notes on Article 13

13.01 Two alternatives on enforcement are presented in Article 13. The choice between them has been left to the Diplomatic Conference. This is because the issue of enforcement is a horizontal one that must be considered in connection with the two other proposed Treaties published simultaneously with the present proposed Treaty. Each of the two alternatives is based on the enforcement provisions of Part III, Articles 41 to 61, of the TRIPS Agreement.

13.02 Alternative A consists of the text of Article 13 and an Annex. Paragraph (1) introduces the Annex which contains the substantive provisions on enforcement. Paragraph (2) states that the Annex forms an integral part of the proposed Treaty. The provisions of the Annex have the same status as the provisions of the proposed Treaty.

13.03 Alternative B incorporates the enforcement provisions in the TRIPS Agreement by reference. The provisions of Alternative B obligate Contracting Parties to ensure that proper enforcement procedures, as specified in Part III, are available. To this end, Contracting Parties shall apply the relevant provisions of the TRIPS Agreement *mutatis mutandis*.

[End of Notes on Article 13]

Article 13

Special Provisions on Enforcement of Rights

Alternative A (continues on page 43)

(1) Special provisions regarding the enforcement of rights are included in the Annex to the Treaty.

(2) The Annex forms an integral part of this Treaty.

Alternative B

Contracting Parties shall ensure that the enforcement procedures specified in Part III, Articles 41 to 61, of the Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex 1C, of the Marrakesh Agreement Establishing the World Trade Organization, concluded on April 15, 1994 (the "TRIPS Agreement"), are available under their national laws so as to permit effective action against any act of infringement of the rights provided under this Treaty, including expeditious remedies to prevent infringements, and remedies that constitute a deterrent to further infringements. To this end, Contracting Parties shall apply *mutatis mutandis* the provisions of Articles 41 to 61 of the TRIPS Agreement.

[End of Article 13]

Notes on the Annex

14.01 The Annex forms the second part of Alternative A of Article 13. The Annex reproduces in its Articles 1 to 21, Part III, Articles 41 to 61, of the TRIPS Agreement. Certain necessary technical adaptations have been made, corresponding to the joint proposal made by the European Community and its Member States and Australia concerning the enforcement of rights which was submitted for the September 1995 sessions of the Committees of Experts (document BCP/CE/V/8). Certain other modifications have been made concerning clauses that are not relevant with regard to the proposed Treaty.

14.02 No detailed Notes are offered on the specific provisions of the Annex.

[End of Notes on the Annex]

Alternative A (continued from page 41)

ANNEX

Enforcement of Rights

SECTION 1

GENERAL OBLIGATIONS

Article 1

1. Contracting Parties shall ensure that enforcement procedures as specified in this Annex are available under their law so as to permit effective action against any act of infringement of rights covered by this Treaty, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements. These procedures shall be applied in such a manner as to avoid the creation of barriers to legitimate trade and to provide for safeguards against their abuse.

2. Procedures concerning the enforcement of rights covered by this Treaty shall be fair and equitable. They shall not be unnecessarily complicated or costly, or entail unreasonable time-limits or unwarranted delays.

3. Decisions on the merits of a case shall preferably be in writing and reasoned. They shall be made available at least to the parties to the proceeding without undue delay. Decisions on the merits of a case shall be based only on evidence in respect of which parties were offered the opportunity to be heard.

4. Parties to a proceeding shall have an opportunity for review by a judicial authority of final administrative decisions and, subject to jurisdictional provisions in a Contracting Party's law concerning the importance of a case, of at least the legal aspects of initial judicial decisions on the merits of a case. However, there shall be no obligation to provide an opportunity for review of acquittals in criminal cases.

5. It is understood that this Annex does not create any obligation to put in place a judicial system for the enforcement of rights covered by this Treaty distinct from that for the enforcement of law in general, nor does it affect the capacity of Contracting Parties to enforce their law in general. Nothing in this Annex creates any obligation with respect to the distribution of resources as between enforcement of rights covered by this Treaty and the enforcement of law in general.

SECTION 2

CIVIL AND ADMINISTRATIVE PROCEDURES AND REMEDIES

Article 2

Fair and Equitable Procedures

Contracting Parties shall make available to the right holders[1] civil judicial procedures concerning the enforcement of any right covered by this Treaty. Defendants shall have the right to written notice which is timely and contains sufficient detail, including the basis of the claims. Parties shall be allowed to be represented by independent legal counsel, and procedures shall not impose overly burdensome requirements concerning mandatory personal appearances. All parties to such procedures shall be duly entitled to substantiate their claims and to present all relevant evidence. The procedure shall provide a means to identify and protect confidential information, unless this would be contrary to existing constitutional requirements.

Article 3

Evidence

1. The judicial authorities shall have the authority, where a party has presented reasonably available evidence sufficient to support its claims and has specified evidence relevant to substantiation of its claims which lies in the control of the opposing party, to order that this evidence be produced by the opposing party, subject in appropriate cases to conditions which ensure the protection of confidential information.

2. In cases in which a party to a proceeding voluntarily and without good reason refuses access to, or otherwise does not provide necessary information within a reasonable period, or significantly impedes a procedure relating to an enforcement action, a Contracting Party may accord judicial authorities the authority to make preliminary and final determinations, affirmative or negative, on the basis of the information presented to them, including the complaint or the allegation presented by the party adversely affected by the denial of access to information, subject to providing the parties an opportunity to be heard on the allegations or evidence.

---

[1] For the purpose of this Annex, the term "right holder" includes federations and associations having legal standing to assert such rights.

Article 4

Injunctions

1. The judicial authorities shall have the authority to order a party to desist from an infringement, inter alia to prevent the entry into the channels of commerce in their jurisdiction of imported goods that involve the infringement of a right covered by this Treaty, immediately after customs clearance of such goods. Contracting Parties are not obliged to accord such authority in respect of protected subject matter acquired or ordered by a person prior to knowing or having reasonable grounds to know that dealing in such subject matter would entail the infringement of a right covered by this Treaty.

[Paragraph 2 of Article 44 of the TRIPS Agreement is not reproduced here.]

Article 5

Damages

1. The judicial authorities shall have the authority to order the infringer to pay the right holder damages adequate to compensate for the injury the right holder has suffered because of an infringement of that person's right covered by this Treaty by an infringer who knowingly, or with reasonable grounds to know, engaged in infringing activity.

2. The judicial authorities shall also have the authority to order the infringer to pay the right holder expenses, which may include appropriate attorney's fees. In appropriate cases, Contracting Parties may authorize the judicial authorities to order recovery of profits and/or payment of pre-established damages even where the infringer did not knowingly, or with reasonable grounds to know, engage in infringing activity.

Article 6

Other Remedies

In order to create an effective deterrent to infringement, the judicial authorities shall have the authority to order that goods that they have found to be infringing be, without compensation of any sort, disposed of outside the channels of commerce in such a manner as to avoid any harm caused to the right holder, or, unless this would be contrary to existing constitutional requirements, destroyed. The judicial authorities shall also have the authority to order that materials and implements the predominant use of which has been in the creation of the infringing goods be, without compensation of any sort, disposed of outside the channels of commerce in such a manner as to minimize the risks of further infringements. In considering such requests, the need for proportionality between the seriousness of the infringement and the remedies ordered as well as the interests of third parties shall be taken into account. [A clause not reproduced here.]

Article 7

Right of Information

Contracting Parties may provide that the judicial authorities shall have the authority, unless this would be out of proportion to the seriousness of the infringement, to order the infringer to inform the right holder of the identity of third persons involved in the production and distribution of the infringing goods or services and of their channels of distribution.

Article 8

Indemnification of the Defendant

1. The judicial authorities shall have the authority to order a party at whose request measures were taken and who has abused enforcement procedures to provide to a party wrongfully enjoined or restrained adequate compensation for the injury suffered because of such abuse. The judicial authorities shall also have the authority to order the applicant to pay the defendant expenses, which may include appropriate attorney's fees.

2. In respect of the administration of any law pertaining to the protection or enforcement of rights covered by this Treaty, Contracting Parties shall only exempt both public authorities and officials from liability to appropriate remedial measures where actions are taken or intended in good faith in the course of the administration of that law.

Article 9

Administrative Procedures

To the extent that any civil remedy can be ordered as a result of administrative procedures on the merits of a case, such procedures shall conform to principles equivalent in substance to those set forth in this Section.

SECTION 3

PROVISIONAL MEASURES

Article 10

1. The judicial authorities shall have the authority to order prompt and effective provisional measures:

(a) to prevent an infringement of any right covered by this Treaty from occurring, and in particular to prevent the entry into the channels of commerce in their jurisdiction of goods, including imported goods immediately after customs clearance;

(b) to preserve relevant evidence in regard to the alleged infringement.

2. The judicial authorities shall have the authority to adopt provisional measures inaudita altera parte where appropriate, in particular where any delay is likely to cause irreparable harm to the right holder, or where there is a demonstrable risk of evidence being destroyed.

3. The judicial authorities shall have the authority to require the applicant to provide any reasonably available evidence in order to satisfy themselves with a sufficient degree of certainty that the applicant is the right holder and that the applicant's right is being infringed or that such infringement is imminent, and to order the applicant to provide a security or equivalent assurance sufficient to protect the defendant and to prevent abuse.

4. Where provisional measures have been adopted inaudita altera parte, the parties affected shall be given notice, without delay after the execution of the measures at the latest. A review, including a right to be heard, shall take place upon request of the defendant with a view to deciding, within a reasonable period after the notification of the measures, whether these measures shall be modified, revoked or confirmed.

5. The applicant may be required to supply other information necessary for the identification of the goods concerned by the authority that will execute the provisional measures.

6. Without prejudice to paragraph 4, provisional measures taken on the basis of paragraphs 1 and 2 shall, upon request by the defendant, be revoked or otherwise cease to have effect, if proceedings leading to a decision on the merits of the case are not initiated within a reasonable period, to be determined by the judicial authority ordering the measures where a Contracting Party's law so permit or, in the absence of such a determination, not to exceed 20 working days or 31 calendar days, whichever is the longer.

7. Where the provisional measures are revoked or where they lapse due to any act or omission by the applicant, or where it is subsequently found that there has been no infringement or threat of infringement of a right covered by this Treaty, the judicial authorities shall have the authority to order the applicant, upon request of the defendant, to provide the defendant appropriate compensation for any injury caused by these measures.

8. To the extent that any provisional measure can be ordered as a result of administrative procedures, such procedures shall conform to principles equivalent in substance to those set forth in this Section.

SECTION 4

SPECIAL REQUIREMENTS RELATED TO BORDER MEASURES[2]

Article 11

Suspension of Release by Customs Authorities

Contracting Parties shall, in conformity with the provisions set out below, adopt procedures[3] to enable a right holder, who has valid grounds for suspecting that the importation of [words omitted] pirated goods[4] may take place, to lodge an application in writing with competent authorities, administrative or judicial, for the suspension by the customs authorities of the release into free circulation of such goods. [A clause omitted]. Contracting Parties may also provide for corresponding procedures concerning the suspension by the customs authorities of the release of infringing goods destined for exportation from their territories.

Article 12

Application

Any right holder initiating the procedures under Article 11 shall be required to provide adequate evidence to satisfy the competent authorities that, under the laws of the country of importation, there is prima facie an infringement of the right holder's right covered by this

---

2 Where a Contracting Party has dismantled substantially all controls over movement of goods across its border with another Contracting Party with which it forms part of a customs union, it shall not be required to apply the provisions of this Section at that border.

3 It is understood that there shall be no obligation to apply such procedures to imports of goods put on the Market in another country by or with the consent of the right holder, or to goods in transit.

4 For the purposes of this Annex:
"pirated goods" shall mean any goods which are copies made without the consent of the right holder or person duly authorized by the right holder in the country of production and which are made directly or indirectly from an article where the making of that copy would have constituted an infringement of a right covered by this Treaty under the law of the country of importation.

Treaty and to supply a sufficiently detailed description of the goods to make them readily recognisable by the customs authorities. The competent authorities shall inform the applicant within a reasonable period whether they have accepted the application and, where determined by the competent authorities, the period for which the customs authorities will take action.

Article 13

Security or Equivalent Assurance

1. The competent authorities shall have the authority to require an applicant to provide a security or equivalent assurance sufficient to protect the defendant and the competent authorities and to prevent abuse. Such security or equivalent assurance shall not unreasonably deter recourse to these procedures.

[Paragraph 2 of Article 53 of the TRIPS Agreement is not reproduced here.]

Article 14

Notice of Suspension

The importer and the applicant shall be promptly notified of the suspension of the release of goods according to Article 11.

Article 15

Duration of Suspension

If, within a period not exceeding 10 working days after the applicant has been served notice of the suspension, the customs authorities have not been informed that proceedings leading to a decision on the merits of the case have been initiated by a party other than the defendant, or that the duly empowered authority has taken provisional measures prolonging the suspension of the release of the goods, the goods shall be released, provided that all other conditions for importation or exportation have been complied with; in appropriate cases, this time-limit may be extended by another 10 working days. If proceedings leading to a decision on the merits of the case have been initiated, a review, including a right to be heard, shall take place upon request of the defendant with a view to deciding, within a reasonable period, whether these measures shall be modified, revoked or confirmed. Notwithstanding the above, where the suspension of the release of goods is carried out or continued in accordance with a provisional judicial measure, the provisions of paragraph 6 of Article 10 shall apply.

Article 16

Indemnification of the Importer and of the Owner of the Goods

Relevant authorities shall have the authority to order the applicant to pay the importer, the consignee and the owner of the goods appropriate compensation for any injury caused to them through the wrongful detention of goods or through the detention of goods released pursuant to Article 15.

Article 17

Right of Inspection and Information

Without prejudice to the protection of confidential information, Contracting Parties shall provide the competent authorities the authority to give the right holder sufficient opportunity to have any goods detained by the customs authorities inspected in order to substantiate the right holder's claims. The competent authorities shall also have authority to give the importer an equivalent opportunity to have any such goods inspected. Where a positive determination has been made on the merits of a case, Contracting Parties may provide the competent authorities the authority to inform the right holder of the names and addresses of the consignor, the importer and the consignee and of the quantity of goods in question.

Article 18

Ex Officio Action

Where Contracting Parties require competent authorities to act upon their own initiative and to suspend the release of goods in respect of which they have acquired prima facie evidence that a right covered by this Treaty is being infringed:

(a) the competent authorities may at any time seek from the right holder any information that may assist them to exercise these powers;

(b) the importer and the right holder shall be promptly notified of the suspension. Where the importer has lodged an appeal against the suspension with the competent authorities, the suspension shall be subject to the conditions, mutatis mutandis, set out at Article 15;

(c) Contracting Parties shall only exempt both public authorities and officials from liability to appropriate remedial measures where actions are taken or intended in good faith.

Article 19

Remedies

Without prejudice to other rights of action open to the right holder and subject to the right of the defendant to seek review by a judicial authority, competent authorities shall have the authority to order the destruction or disposal of infringing goods in accordance with the principles set out in Article 6. [A clause not reproduced here.]

Article 20

De Minimis Imports

Contracting Parties may exclude from the application of above provisions small quantities of goods of a non-commercial nature contained in travellers' personal luggage or sent in small consignments.

SECTION 5

CRIMINAL PROCEDURES

Article 21

Contracting Parties shall provide for criminal procedures and penalties to be applied at least in cases of wilful [words omitted] piracy on a commercial scale. Remedies available shall include imprisonment and/or monetary fines sufficient to provide a deterrent, consistently with the level of penalties applied for crimes of a corresponding gravity. In appropriate cases, remedies available shall also include the seizure, forfeiture and destruction of the infringing goods and of any materials and implements the predominant use of which has been in the commission of the offence. [A clause not reproduced here.]

[End of document]

APPENDIX D

104TH CONGRESS
2D SESSION

H. R. 3531

To amend title 15, United States Code, to promote investment and prevent intellectual property piracy with respect to databases.

IN THE HOUSE OF REPRESENTATIVES

MAY 23, 1996

Mr. MOORHEAD introduced the following bill; which was referred to the Committee on the Judiciary

A BILL

To amend title 15, United States Code, to promote investment and prevent intellectual property piracy with respect to databases.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Database Investment and Intellectual Property Antipiracy Act of 1996".

SEC. 2. DEFINITIONS.

"Change of commercial significance" means a change that a reasonable user of a database would regard as affecting the quality, quantity or value of contents of that database as a whole.

"Commerce" means all commerce that may lawfully be regulated by Congress.

"Database" means a collection, assembly or compilation, in any form or medium now or later known or developed, of works, data or other materials, arranged in a systematic or methodical way.

"Database maker" means the natural or juristic person making a substantial investment, qualitatively or quantitatively, in the collection, assembly, verification, organization and/or presentation of the contents of the database. Unless provided otherwise by contract—

(1) where two or more persons qualify as the makers of a database, they are jointly the database maker;

(2) where a database is made by employees within the scope of their employment, the employer is the database maker; and

(3) where a database is made pursuant to special order or commission, the person who ordered or commissioned the database is the database maker.

"Database management information" means the name and other identifying information of the database maker, the name and other identifying information of the database owner, and terms and conditions for extraction and use or reuse of the contents of the database.

"Database owner" means the database maker or the natural or juristic person who is the database maker's successor in interest.

"Extraction" means the permanent or temporary transfer of all or a substantial part of the contents of a database or of a copy or copies thereof. Such transfer may be to an identical or different medium, and by any means or in any form, now or later known or developed.

"Governmental entity" means the United States Government, any State, any agency or instrumentality of either, and any officer or employee of any of the foregoing acting in his or her official capacity.

"Insubstantial part" of a database means any portion of the contents of a database whose extraction, use or reuse does not diminish the value of the database, conflict with a normal exploitation of the database or adversely affect the actual or potential market for the database.

"Juristic person" means any firm, corporation, union, association, non-profit institution, or other organization capable of suing and being sued in a court of law, but does not include a governmental entity.

"Place in commercial use" means to use or reuse, or to authorize use or reuse, for direct or indirect commercial advantage or for financial gain.

"Person" means any natural person, any juristic person, and any governmental entity.

"Use" and "reuse" means making available all or a substantial part, qualitatively or quantitatively, of the contents of a database, or access to all or such substantial part, whether or not for direct or indirect commercial advantage or financial gain, by any means now known or later developed, including any of the following: (i) marketing, selling, or renting; (ii) in the form of permanent or temporary copies; or (iii) by distribution, any online or other form of transmission.

SEC. 3. DATABASES SUBJECT TO THE ACT.

(a) A database is subject to the Act if it is the result of a qualitatively or quantitatively substantial investment of human, technical, financial or other resources in the collection, assembly, verification, organization or presentation of the database contents, and (i) the database is used or reused in commerce; or (ii) the database owner intends to use or reuse the database in commerce.

(b) A database otherwise subject to this Act shall remain subject, regardless of whether it is made available to the public or in commercial use; the form or medium in which it is embodied; or whether the database or any contents of the database are intellectual creations.

(c) Except for a database made by a governmental entity, any database otherwise subject to this Act, is not excluded herefrom because its contents have been obtained from a governmental entity.

(d) Computer programs are not subject to this Act, including without limitation any computer programs used in the manufacture, production, operation or maintenance of a database. However, the contents of a database otherwise subject to this Act remain subject, notwithstanding their direct or indirect incorporation in a computer program or other work.

SEC. 4. PROHIBITED ACTS.

(a) No person shall, without the authorization of the database owner—

(1) extract, use or reuse all or a substantial part, qualitatively or quantitatively, of the contents of a database subject to this Act in a manner that conflicts with the database owner's normal exploitation of the database or adversely affects the actual or potential market for the database;

(2) engage, notwithstanding section 5(a), in the repeated or systematic extraction, use or reuse of insubstantial parts, qualitatively or quantitatively, of the contents of a database subject to this Act in a manner that cumulatively conflicts with the database

owner's normal exploitation of the database or adversely affects the actual or potential market for the database; or

(3) procure, direct or commission any act prohibited by subsections (i) or (ii).

(b) Acts that conflict with a normal exploitation of the database or adversely affect the actual or potential market for the database include but are not limited to the extraction, use or reuse of all or a substantial part of the contents of a database—

(1) in a product or service that directly or indirectly competes in any market with the database from which it was extracted; or

(2) in a product or service that directly or indirectly competes in any market in which the database owner has a demonstrable interest or expectation in licensing or otherwise using or reusing the database; or

(3) in a product or service for customers who might otherwise reasonably be expected to be customers for the database; or

(4) by or for multiple persons within an organization or entity in lieu of the authorized additional use or reuse (by license, purchase or otherwise) of copies of the database by or for such persons.

SEC. 5. EXCEPTIONS TO PROHIBITED ACTS.

(a) Subject to section 4(a)(ii), a lawful user of a database made available to the public or placed in commercial use is not prohibited from extracting, using or reusing insubstantial parts of its contents, qualitatively or quantitatively, for any purposes whatsoever.

(b) Nothing in this Act shall in any way restrict any person from independently collecting, assembling or compiling works, data or materials from sources other than a database subject to this Act.

SEC. 6. DURATION OF PROHIBITIONS.

(a) A database becomes subject to this Act when the necessary investment has been made to qualify its maker as such under section 2. The database shall remain subject to this Act for a period of twenty-five years from the first of January following the date when it was first made available to the public or the date when it was first placed in commercial use, whichever is earlier.

(b) Any change of commercial significance, qualitatively or quantitatively, to a database, including any such change through the accumulation of successive additions, deletions, reverifications, alterations, modifications in organization or presentation, or other modifications, shall make the resulting database subject to this Act for its own term, as calculated under subsection (a).

SEC. 7. CIVIL REMEDIES FOR VIOLATION OF SECTION 4.

(a) CIVIL ACTIONS.—A database owner injured by a violation of section 4 may bring a civil action for such a violation in an appropriate United States district court without regard to the amount in controversy: *Provided however*, That any action against a State governmental entity may be brought in any court that has jurisdiction over claims against such entity.

(b) TEMPORARY AND PERMANENT INJUNCTIONS.—Any court having jurisdiction of a civil action arising hereunder shall have the power to grant temporary and permanent injunctions, according to the principles of equity and upon such terms as the court may deem reasonable, to prevent the violation of section 4. Any such injunction granted upon hearing, after notice to the party sought to be enjoined, by any district court of the United States, may be served on the party against whom such injunction is granted anywhere in the United States where such person may be found, and shall be operative and may be enforced by proceedings in contempt or otherwise by any United States district court having jurisdiction over such party.

(c) IMPOUNDMENT.—At any time while an action hereunder is pending, the court may order the impounding, on such terms as it deems reasonable, of all copies of contents of databases extracted and or used or reused

in violation of section 4, and of all masters, tapes, disks, diskettes, or other articles by means of which such copies may be reproduced. The court may, as part of a final judgment or decree finding a violation of section 4, order the remedial modification or destruction of all copies of contents of databases extracted, used or reused in violation of section 4, and of all masters, tapes, disks, diskettes, or other articles by means of which such copies may be reproduced.

(d) MONETARY RELIEF.—When a violation of section 4 has been established in any civil action arising hereunder, the plaintiff shall be entitled, subject to principles of equity, to recover (i) defendant's profit, (ii) any damages sustained by the plaintiff, and (iii) the costs of the action. The court shall assess such profits or damages or cause the same to be assessed under its direction. In assessing profits the plaintiff shall be required to prove defendant's sales only; defendant must prove all elements of cost or deduction claimed. In assessing damages the court may enter judgment, according to the circumstances of the case, for any sum above the amount found as actual damages, not exceeding three times such amount. If the court shall find that the amount of the recovery based on profits is either inadequate or excessive, the court may in its discretion enter judgment for such sum as it finds just. The

court in its discretion may award reasonable attorney fees to the prevailing party.

(e) Subsections (b) and (c) shall not apply to any action against the United States Government.

(f) The relief provided under this section shall be available against a State governmental entity to the extent allowed by applicable law.

SEC. 8. CRIMINAL OFFENSES AND PENALTIES FOR VIOLATION OF SECTION 4.

(a) Any person who violates section 4 willfully, and—

(1) does so for direct or indirect commercial advantage or financial gain; or

(2) thereby causes loss or damage to a database owner aggregating $10,000 or more in any one-year calendar period, shall be punished as provided in subsection (b).

(b) An offense under subsection (a) shall be punishable by a fine of not more than $250,000 or imprisonment for not more than five years, or both. A second or subsequent offense under subsection (a) shall be punishable by a fine of not more than $500,000, imprisonment for not more than ten years, or both.

SEC. 9. RELATIONSHIP TO OTHER LAWS.

(a) The remedies against violations hereunder shall be without prejudice to any remedies under any copyright

that may subsist in the database, any contents of the database, or the selection, coordination or arrangement of such contents. Such remedies shall not limit, impair, or otherwise affect the existence, scope or duration of protection under any such copyright.

(b) Nothing in this Act shall restrict the rights of parties freely to enter into licenses or any other contracts with respect to databases or their contents.

(c) Nothing in this Act shall prejudice provisions concerning copyright, rights related to copyright or any other rights or obligations in the database or its contents, including laws in respect of patent, trademark, design rights, antitrust or competition, trade secrets, data protection and privacy, access to public documents, and the law of contract.

SEC. 10. CIRCUMVENTION OF DATABASE PROTECTION SYSTEMS.

No person shall import, manufacture or distribute any device, product, or component incorporated into a device or product, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without the authority of the database owner or the law, any process, treatment, mechanism or system which prevents or inhib-

its the extraction, use or reuse of the contents of the database in violation of section 4 hereof.

SEC. 11. INTEGRITY OF DATABASE MANAGEMENT INFORMATION.

(a) FALSE DATABASE MANAGEMENT INFORMATION.—No person shall knowingly provide database management information that is false, or knowingly publicly distribute or import for public distribution database management information that is false.

(b) REMOVAL OR ALTERATION OF DATABASE MANAGEMENT INFORMATION.—No person shall, without authority of the database owner or the law, (i) knowingly remove or alter any database management information, (ii) knowingly distribute or import for distribution database management information that has been altered without authority of the database owner or the law; or (iii) knowingly distribute or import for distribution copies of a database from which database management information has been removed without the authority of the database owner or the law.

SEC. 12. CIVIL REMEDIES FOR VIOLATION OF SECTIONS 10 OR 11.

(a) CIVIL ACTIONS.—Any person injured by a violation of section 10 or section 11 may bring a civil action for such violation in an appropriate United States district

court, without regard to the amount in controversy: *Provided, however,* That any action against a State governmental entity may be brought in any court that has jurisdiction over claims against such entity.

(b) POWERS OF THE COURT.—In an action brought under subsection (a), the court—

(1) may grant temporary and permanent injunctions on such terms as it deems reasonable to prevent or restrain a violation;

(2) at any time while an action is pending, may order the impounding, on such terms as it deems reasonable, of any device or product that is in the custody or the control of the alleged violator and that the court has reasonable cause to believe was involved in a violation;

(3) may award damages under subsection (c);

(4) in its discretion may allow the recovery of costs by or against any party other than the United States or an officer thereof;

(5) in its discretion may award reasonable attorney's fees to the prevailing party; and

(6) may, as part of a final judgment or decree finding a violation, order the remedial modification or the destruction of any device or product involved in the violation that is in the custody or control of

the violator or has been impounded under subsection (ii).

(c) AWARDS OF DAMAGES.—

(1) IN GENERAL.—Except as otherwise provided in this Act, a violator is liable for either (A) the actual damages and any additional profits of the violator, as provided by subsection (ii), or (B) statutory damages, as provided by subsection (iii).

(2) ACTUAL DAMAGES.—The court shall award to the complaining party the actual damages suffered by him or her as a result of the violation, and any profits of the violator that are attributable to the violation and are not taken into account in computing the actual damages, if the complaining party elects such damages at any time before final judgment is entered.

(3) STATUTORY DAMAGES.—

(A) At any time before final judgment is entered, a complaining party may elect to recover an award of statutory damages for each violation of section 10 in the sum of not less than $200 or more than $2,500 per device, product, offer or performance of service, as the court considers just.

(B) At any time before final judgment is entered, a complaining party may elect to recover an award of statutory damages for each violation of section 11 in the sum of not less than $2,500 or more than $25,000.

(4) REPEATED VIOLATIONS.—In any case in which the injured party sustains the burden of proving, and the court finds, that a person has violated section 10 or 11 within three years after a final judgment was entered against that person for another such violation, the court may increase the award of damages up to triple the amount that would otherwise be awarded, as the court considers just.

(5) INNOCENT VIOLATIONS.—The court in its discretion may reduce or remit altogether the total award of damages in any case in which the violator sustains the burden of proving, and the court finds, that the violator was not aware and had no reason to believe that its acts constituted a violation.

(d) Subsections (b) (i) and (ii) shall not apply to any action against the United States Government.

(e) The relief provided under subsection (b) shall be available against a State governmental entity to the extent allowed by applicable law.

SEC. 13. CRIMINAL OFFENSES AND PENALTIES FOR VIOLATION OF SECTION 11.

Any person who violates section 11 with intent to defraud shall be fined not more than $500,000 or imprisoned for not more than five years, or both.

SEC. 14. LIMITATIONS ON ACTIONS.

No action shall be maintained under this Act unless it is commenced within three years after the database owner knew or should have known of the claim.

SEC. 15. EFFECTIVE DATE.

(a) This Act shall take effect immediately upon enactment, and shall be applicable to acts committed on or after that date.

(b) No person shall be liable under this Act for use or reuse of database contents lawfully extracted from a database, prior to the effective date of this Act, by that person or by that person's predecessor in interest.

○

APPENDIX E

U.S. COPYRIGHT OFFICE DATABASE MEETING PARTICIPANTS

ORGANIZATION	REPRESENTATIVE
1. Library Groups (March 12, 1997)	
American Library Association	Adam Eisgrau Carol Henderson
Association of American Law Libraries	Robert Oakley
Association of Research Libraries	Prudence Adler
Medical Library Association	Mary Langman
Special Libraries Association	John Crosby
2. Video Software Dealers Association/Viacom (May 12, 1997)	
Viacom	Thomas Polgar
Video Software Dealers Association	John T. Mitchell
3. Science Groups (May 12, 1997)	
American Association for the Advancement of Science	Alexander Fowler Mark Frankel
American Meteorological Society	Keith Seitter
American Physical Society	Robert Park
Association for Computing Machinery U.S. Public Policy Office	Lauren Gelman
Defense Technical Information Center U.S. Dept. of Defense	Kurt Molholm R. Paul Ryan
International Council for Scientific Unions	Ferris Webster

ORGANIZATION	REPRESENTATIVE
National Academy of Engineering	Jerome H. Reichman
National Imagery and Mapping Agency Office of the General Counsel U.S. Dept. of Defense	Jim Ayres Denise Webster
National Library of Medicine National Institute of Health	Harold Schoolman
National Oceanic and Atmospheric Administration Office of the General Counsel Office of Policy and Strategic Planning U.S. Dept. of Commerce	 Kira Alvarez Chuck Wooldridge
National Research Council	Anne Linn
National Science Foundation Directorate for Geosciences Office of the General Counsel	 Lou Brown Chris Ashley
Oceans, International Environmental and Scientific Affairs U.S. Dept. of State	Dorothy Bergamaschi
Office of Director Defense Research and Engineering U.S. Dept. of Defense	Col. Alan R. Shaffer
Office of Scientific & Technical Information U.S. Dept. of Energy	Sharon Jordan
Office of the Oceanographer of the Navy Naval Deputy U.S. Dept. of Commerce	Thomas Cuff
Science and Technical Library National Aeronautics and Space Administration	Roland Ridgeway
Smithsonian Institution Office of the General Counsel	Rachelle V. Brown
U.S. Dept. of Commerce	John Raubitschek

ORGANIZATION	REPRESENTATIVE
U.S. Environmental Protection Agency Office of the General Counsel	Alan Ehrlich Thomas Mace
U.S. Geological Survey Biological Resources Division U.S. Dept. of the Interior	Gail Hodge Joyce Mann Justin P. Patterson Larry Pettinger

4. **Professor Jerome Reichman (May 13, 1997)**

5. **Educational Groups (May 13, 1997)**

American Association of Community Colleges	Christopher Dalziel
American Association of University Professors	Jonathan Alger
American Council of Learned Societies	Douglas Bennett
Association of American Colleges and Universities	Joann Stevens
Association of American Universities	John Vaughn
Cal-Tech, Field Museum of Chicago	Todd Dickinson
Coalition for Networked Information	Joan Lippincott
National Association of State Universities and Land Grant Colleges	Martha Winnacker
National Education Association	Carolyn Breedlove

6. **Database Producers Supporting Legislation (May 14, 1997)**

American Association of University Presses	Mindy Koyanis
American Medical Association	Jack Emery
Association of American Publishers	Allan Adler

ORGANIZATION	REPRESENTATIVE
Coalition Against Database Piracy	Michael Klipper Christopher Meyer
Cox Enterprises	Sandy Wilson
Dow Jones & Co.	Patrice Ettinger David Wittenstein
Information Industry Association	William Ashworth Daniel Duncan Steven J. Metalitz
Management Association for Private Photogrammetric Surveyors	Daniel L. Benson
The McGraw-Hill Companies	Cynthia Bradden
MDL Information Systems Elsevier Science Company	Esther Allen
The NASDAQ Stock Market, Inc	Joel Wolfson
Proprietary Rights Counsel	Morton David Goldberg
R&D Magazine	Tim Studt
Reed Elsevier	Henry Horbaczewski
The Thomson Corporation	Michael Harris Liz Robbins Gerry Sikorski
Warren Publishing	Lynn Levine Paul Warren

7. **Database Producers Opposing or Not Supporting Legislation (May 14, 1997)**

American Association of Legal Publishers	Eleanor Lewis
American Statistical Association	John Gardinier

ORGANIZATION	REPRESENTATIVE
Association of Directory Publishers	Claudia James Theodore Whitehouse
Bell Atlantic	Sarah Deutsch
Dun & Bradstreet	Michael Brewer Jean Cantrell
MCI Communications	Theresa Swinehart
McLeod USA Publishing Company	Randall Rings
Online Banking Association	Jonathan Band
STATS, Inc.	John Dewan Andrew Deutsch
U.S. Telephone Association	Larry Clinton

8. **Newspaper Association of America (May 20, 1997)**

   E. Molly Leahy
   Rene P. Milam

9. **Professor Peter Jaszi (May 22, 1997)**

10. **National Association of Broadcasters (May 22, 1997)**

American Broadcasting Company	Charlene Vanlier
National Association of Broadcasters	Ben Ivins

11. **Sun Microsystems (May 29, 1997)** — Lowell Sachs

12. **Science Database Producers and Users (June 10, 1997)**

American Cyanamid	Dr. David Saarai

ORGANIZATION	REPRESENTATIVE
Knight Ridder Information	Robert Simons
Liz Robbins Associates	Liz Robbins
Merck & Co.	Dr. Martha Quesada Eric Allen
Proskauer Rose	Jon Baumgarten
R&D Magazine	Tim Studt
SmithKlein Beecham	Dr. Merrie Wise Teresa Heckner

13. National School Board Association (June 12, 1997)

August Steinhilber

14. Library Groups (June 13, 1997)

American Library Association	Adam Eisgrau
Association of American Law Libraries	Robert Oakley
Association of Research Libraries	Prudence Adler
Medical Library Association	Mary Langman
Special Libraries Association	John Crosby

15. American Telephone & Telegraph (June 18, 1997)

Marilyn Cade
Michele Farber
Liz Gasster

16. Michael J. Remington (June 30, 1997)

ISBN 0-16-049211-4

234

BEST COPY AVAILABLE